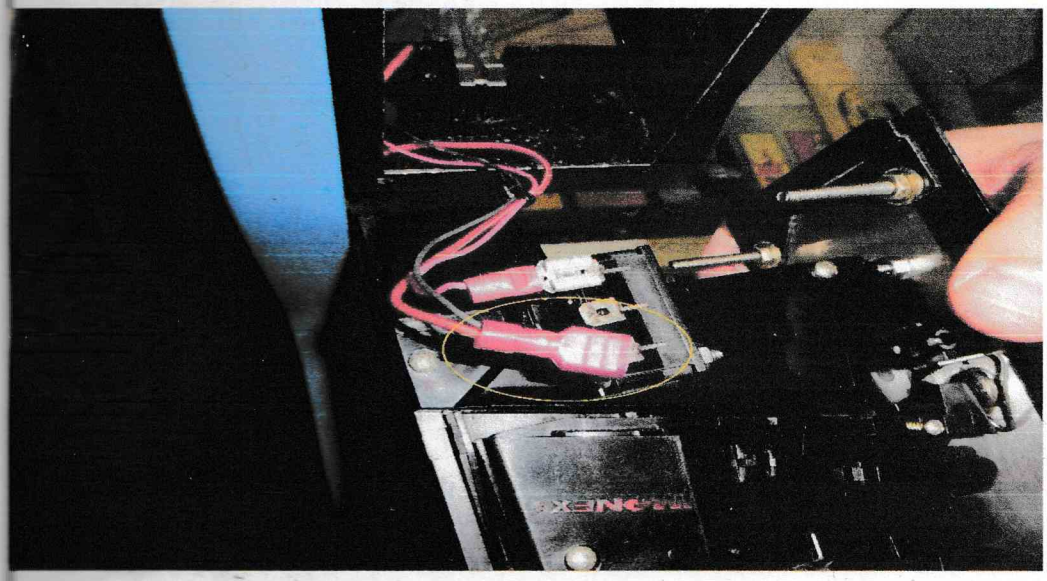
Over Under
Mid with
Tri door.

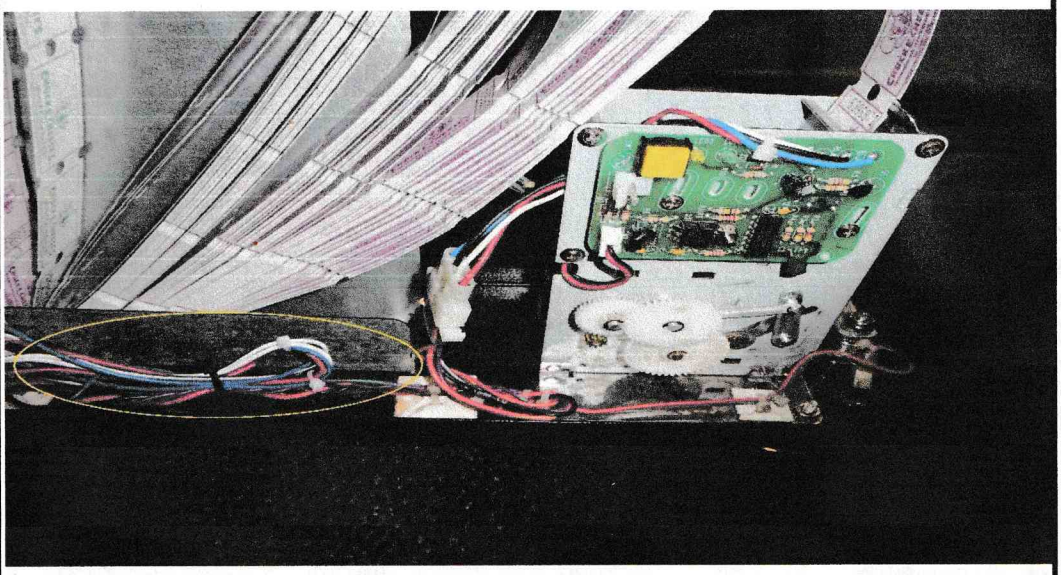
Tech PlayPass Install Training

_____ Go Through each item in the Grainger Kit
_____ Go Through each item in the Semnox Kit
_____ Go through Semnox Reader Installation Manual
_____ Go through Semnox Controller and Speedy install manual
_____ Go through store and Go live checklist
_____ Print out Door list from Paul. This is emailed to each location
_____ Inventory Doors based off the Master door sheet. Use blue masking tape to label
_____ Inventory Readers, write mac address on master door sheet and mark box with game
_____ Inventory Hoppers
_____ Go to a video game and install the power (refer to pictures on example tab)
_____ Do install on a Kiddie Ride (refer to pictures on example tab)
_____ Do install on a redemption game (refer to pictures on example tab)
_____ Do install on a hopper game (refer to pictures on example tab)

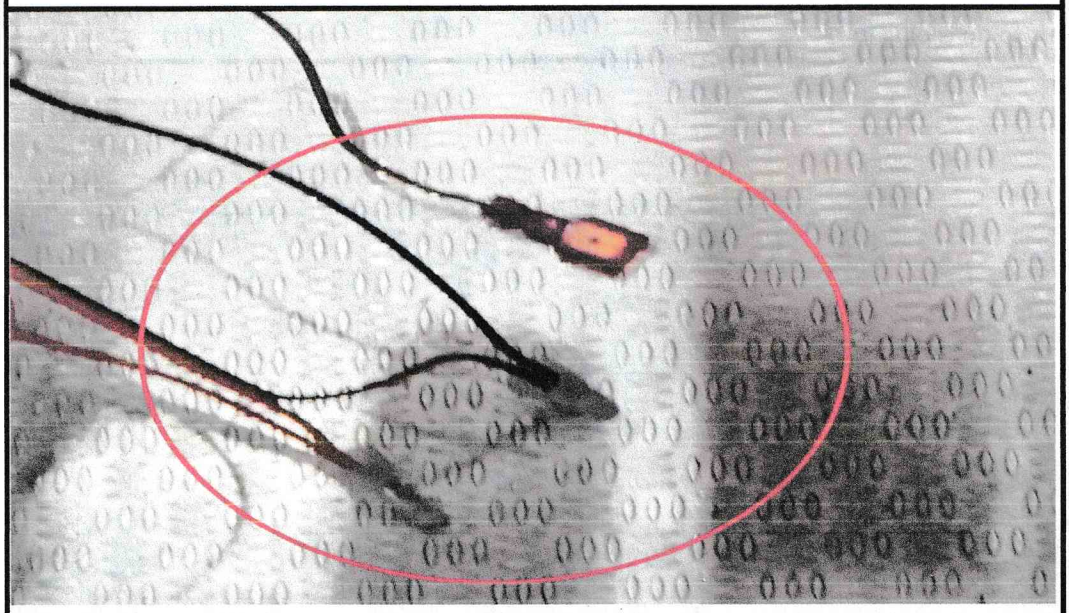


Coin Mech Wire: Ensure all coin mech pulse wire is replaced with the proper size spade connector. Test to make sure it fits the spade connector on the I/O board male connector on the brown wire

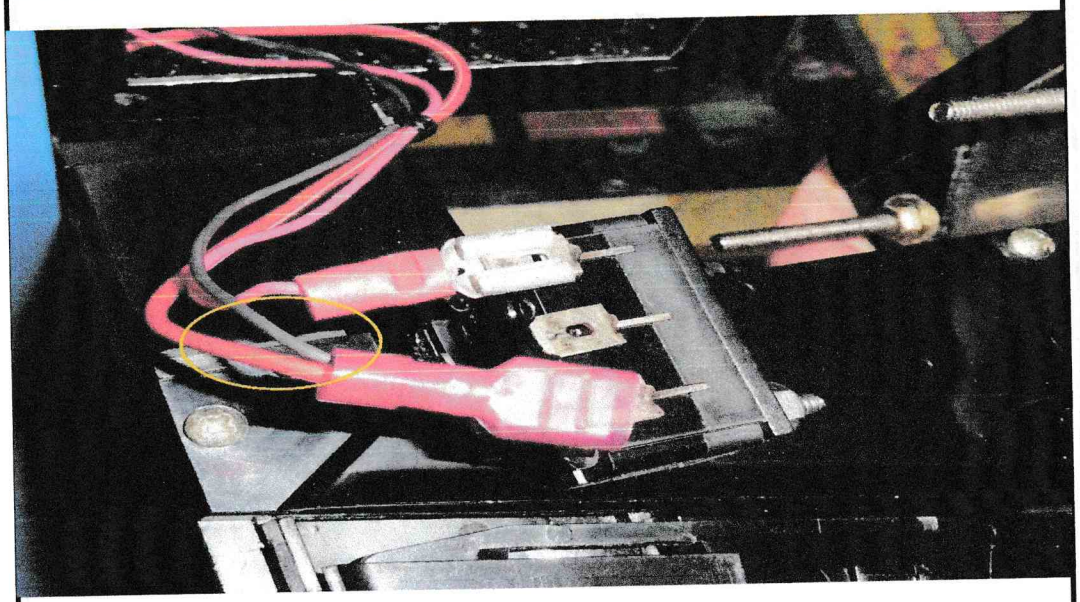
+ Assign a mac # to games when they arrive.
+ Keep switch #3 bank 5 the way it is. on
+ " " #2 bank 4 on
+ Check wires for proper order.
+ Re-seated pot on board.
+ connect wires to board.



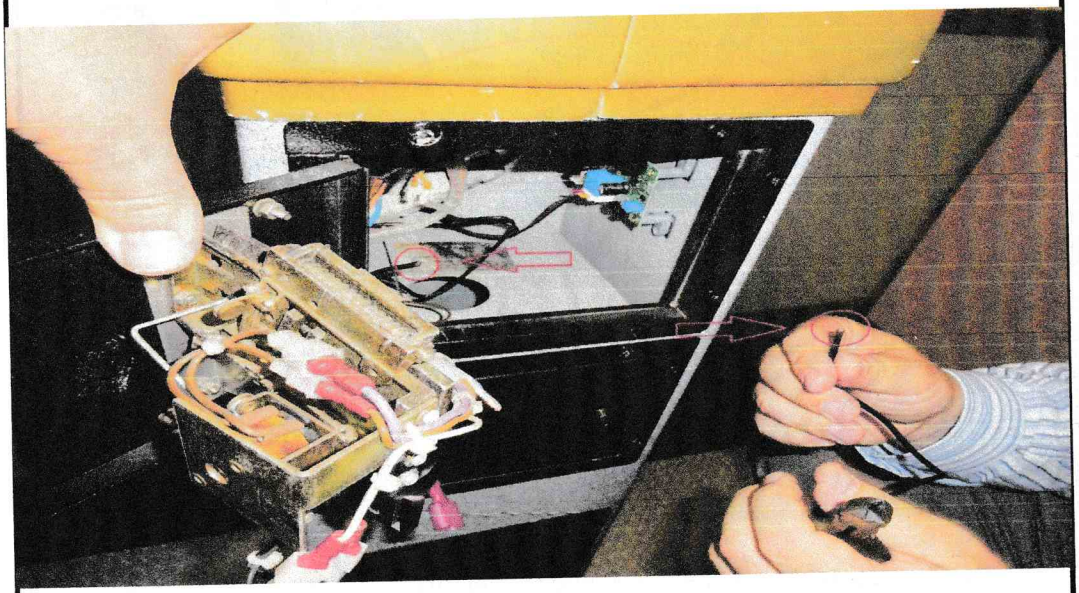
Ticket Harness: Run ticket harness from where the I/O board is mounted (or will be mounted) to the ticket mech. Tie wrap neatly. Remember, this should be plug and play to the ticket mech on install night.



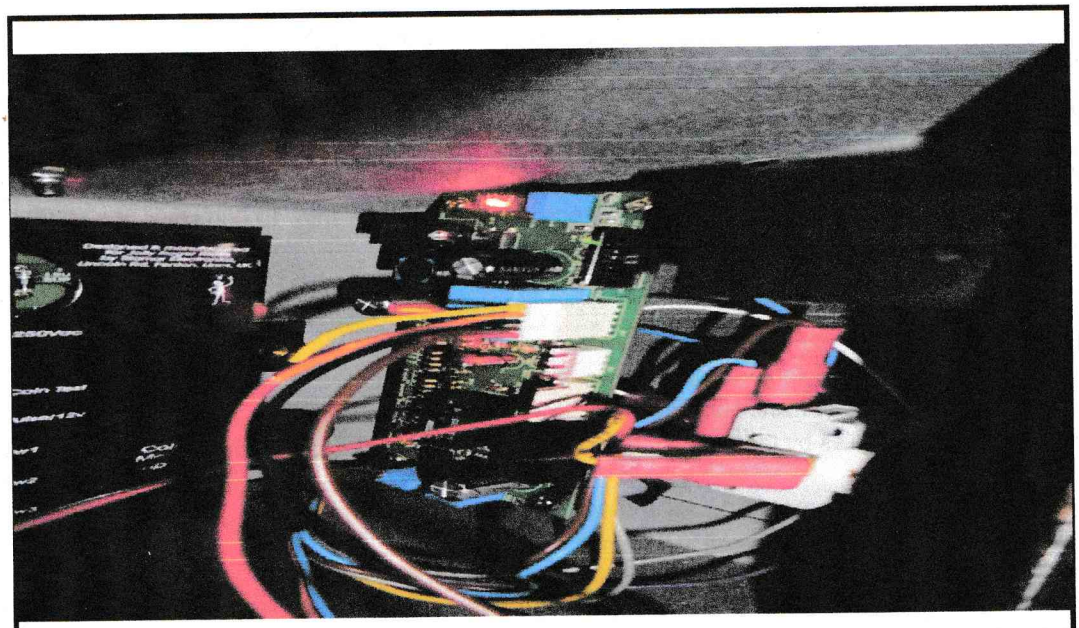
Power: Ideally you want to use the closed end connectors for power and the spade connectors for coin mechs. Remember, when wiring playpass, power should be ran and connected. I/O board should power up. Disconnect harness at I/O board. On install night, all that has to be done is plug up the harness on the I/O board.



Sense Wire: Sense wire from J2 on the I/O boards needs to be pre installed and connected to the coin mechs that requires it (hopper games). Notice the picture. The black sense wire has been hooked up and is ready to go. On install night, the only thing left to do is plug in J2.



External Power: some games will require an external power, when connecting an external power source, you'll have to tie the commons together. Step 1: cut the power cord going to the I/O board. Step 2: connect the red's back together. Step 3: Tie in 12v commons (return from lights) and black wire from J3. Step 4: plug power into I/O board. Board should power up. disconnect and leave in game.



I/O board powered up

Play Pass Go Live Checklists

Pre Install / Install Check List

_____ Monday prior to Go Live, move one BC to back and place Kiosks in position. Power on and hook up Cat6
_____ breaker lock installed for server rack and Manager Panel
_____ Set all games back to one token per play except Fun House, Photo Booth, Laser Maze, Bumper Cars . . .
_____ Nearly all coin pull tokens should be boxed, 3k tokens per box, ready to ship. 10,000 stays at the store
_____ Print out in color I/O card install diagrams, I set per installer
_____ Purchase snacks and drinks for the installers

Go Live Install

_____ Local tech arrive an Hour before close
_____ Several 55 gal trash cans available or large boxes, the more the better
_____ Centrally set up HW bins and misc. supplies
_____ Place game specific supplies by the games - doors, readers, plates, I/O boards, wiring, . . . If they are not stored inside the game
_____ Lay out prepurchased supplemental drinks and snack/food supplies
_____ Lay out game keys for all the attendees to help with install
_____ Lay out all preprinted color copy of I/O card sheets, enough for I per installer
_____ Pull and empty bill changers, move to temporary storage area in location. Tape BC keys to the back of the BC with store number
_____ Secure tokens until they are picked up or shipped

After Close

_____ Assign someone to remove front cash token hoppers. and all associated HW & wiring and discard
_____ Glue down Formica over holes left by escalators
_____ Secure in place kiosks, recycle bin, registration stands, reader stands. Put locks on the small recycle bins.
_____ Assign someone to remove all coin boxes from games, sort, count and bag tokens
_____ Spread everyone and do the install
_____ Clean up
_____ Fill all hopper game hoppers
_____ Check games for full functionality
_____ Check All games are locked

Opener / Relief Technician

_____ Arrive at 8 am

FOH Terminals operational

_____ PlayPass Buttons Visible
_____ Run PlayPass Diagnostics
_____ Receipts Printer
_____ Token Hoppers disabled
_____ Two Hours All You Can Play Working
_____ Two Hour All You Can Play Card #
_____ Extra guest and staff cards secured
_____ Cards loaded in shoes
_____ laminate front counters if it has not been done
_____ Mount a coin box from a game at the registers. Preferably reactor, Big Win, etc.

PlayPass Managers console operational

_____ Keyboard mounted (optional)
_____ RFID Reader mounted
_____ Play Pass activation Button - OK
_____ Two Hour All You Can Play Replacement Button - OK
_____ User Access tested
_____ Game Function Test Edit
_____ Game Function Out of Service
_____ Manage Staff Cards
_____ Launch DashBoard
_____ Create Free Play Card and test

Registration Kiosk Operational

_____ Halo Installed
_____ Check Balance/Activity
_____ Card registration & bonus
_____ Separate Keys, label and put a set in the safe.

Full Service Kiosk's Operational

_____ Remove Upper back plate and take a picture of the PinPad serial numbers (see instructions below)
_____ Accepts Amex
_____ Accepts Visa/ MC
_____ Accepts Debit
_____ Accepts Tokens
_____ Accepts Cash
_____ Prints receipt
_____ Guest cards Installed
_____ Separate Keys, label and put a set in the safe.

Misc.

_____ Token Dispenser Operational
_____ Token Dispenser secured to the floor
_____ Check Balance Stations operational
_____ Check Balance Stations secured to floor
_____ 2 Point games working properly
_____ verify with regional tech on delivery of store tokens -is shipping set up
_____ perform second game test on all games
_____ Set up for pickup of tokens, box tokens collected from Play Pass install
_____ Ensure Rack is locked and keys are labeled in the Safe.
_____ walk closing game room attendant through new procedures
_____ Assemble and Install marketing materials
_____ Verify that transactions can be completed on the FSKs
_____ Verify that the registration can be done on the RGK
_____ Train the store operations team
_____ Verify that Playpass can be issued from the Aloha terminal
_____ Wrist Band Displays have price inserts
_____ Keys for FSK on labeled key ring
_____ Keys for RK on labeled key ring
_____ Keys for Recycle bin on labeled key ring
_____ Remove FSK bill acceptor cover

Pre Install Play Pass Game Checklist

Items coming in:	Y/N
Hopper Kits from Speedy	
Readers/Harness/Hardware from Semnox	
Doors from ICE/Happ	
Hardware Kit from SPT/Grainger	
Uncrate Kiosk as soon as it comes in	
Move Kiosks to BC, hook up cat6 and run update thumb drive. Load up guest passes in both Kiosks	
Circuit Breaker lock on Manager Panel	
Order extra game/gamepull Keys for install, set per installer	
Print out in color I/O card install diagrams, I set per installer	

Tech training video watched?	Y/N

Loc Name/ Number:	
Date:	
Reader Install Date:	

Game Names	Hoppers Inv	Doors Inv	Readers Inv	Readers tested	I/O Card Assembled	Reader Bases Assembled	Doors/ Bunks Assembled	12V power installed	Hopper Cups Mounted	Hoppers Installed	Coin Door screws pre loosened	Mac Address	Notes

2016

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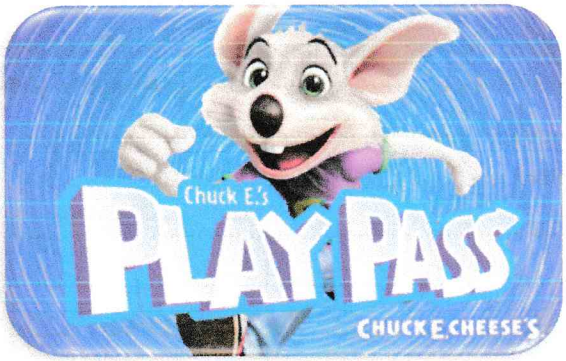
Play Your Way



CEC Play Pass
Reader installation manual

Version 4.21

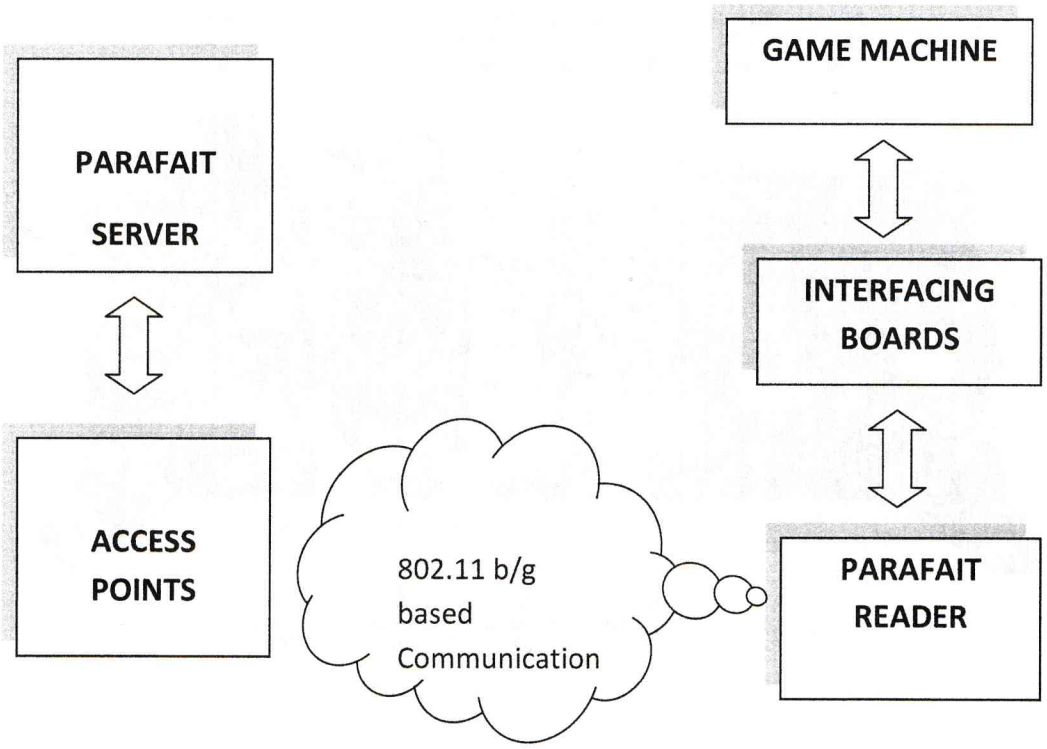
Table of Contents

Introduction 3
Interface Board 4
Connecting interface board to the Non-ticket machines 5
Connecting Interface Board to Ticket Machines 7
DIP Switch Settings 9
Connecting interface Board to quick- coin games 12
Connection Summary 13
Not Ticket Dispensing, Not Hopper machine 13
Ticket Dispensing, Not Hopper Machine 14
Ticket Dispensing Hopper Machine 15
Reader Installation and configuration 16
Reader Functionality 16
Hardware connections 16
Configuration Settings 17
Reader configuration 17
SD Card and Theme 23
Settings in Server 25
Testing 25
Out Of Service 26
Setting machine out of service 26
Removing machines from out of service list 27
Add a new machine 27
Edit Machine – Replacing reader MAC in server 28
Debugging Card reader 30
Debugging Ticket Issues 32
Debugging Hopper Issues 35

Introduction

This document describes the Interface between reader, interface board and the game machine.

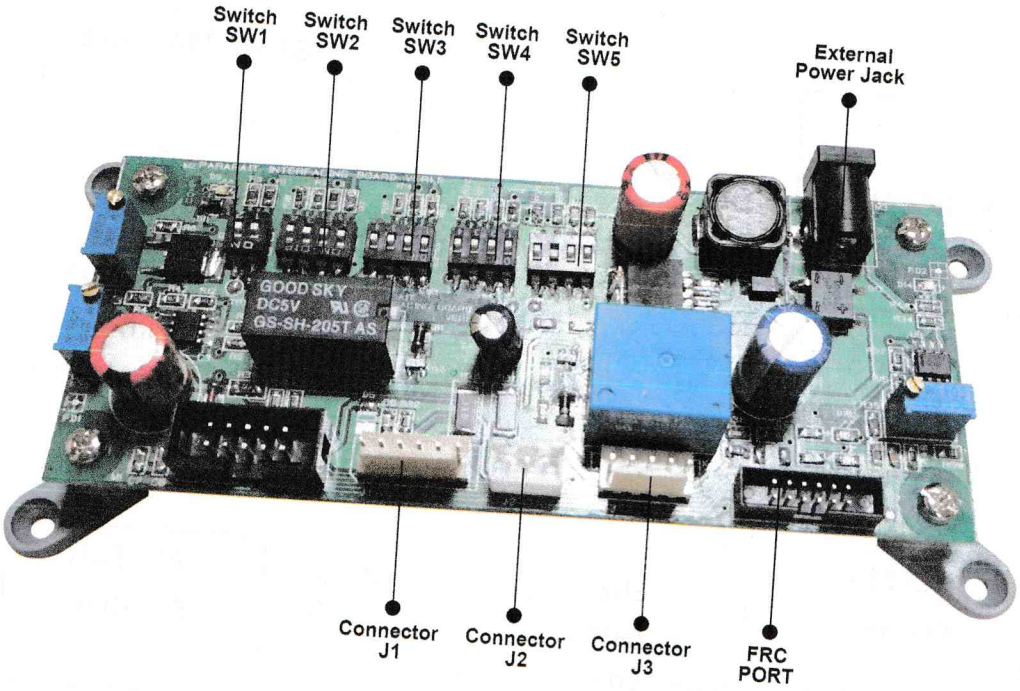
The System is 100% Wireless with low power consumption using advanced technologies. The System has full-fledged interfacing option which can support different types of game machines.



For any questions email support@semnox.com or submit a ticket at http://www.parafait.com/support/

Interface Board

Interface Board is used to provide power supply and necessary interface between game machine and Play Pass reader. There are three connectors and five switches; connectors J1, J2 and J3 are to establish the interface between interface board and the game machines. The switches SW1, SW2, SW3, SW4 and SW5 are to configure the board as per the game machine logic.



Interface Board

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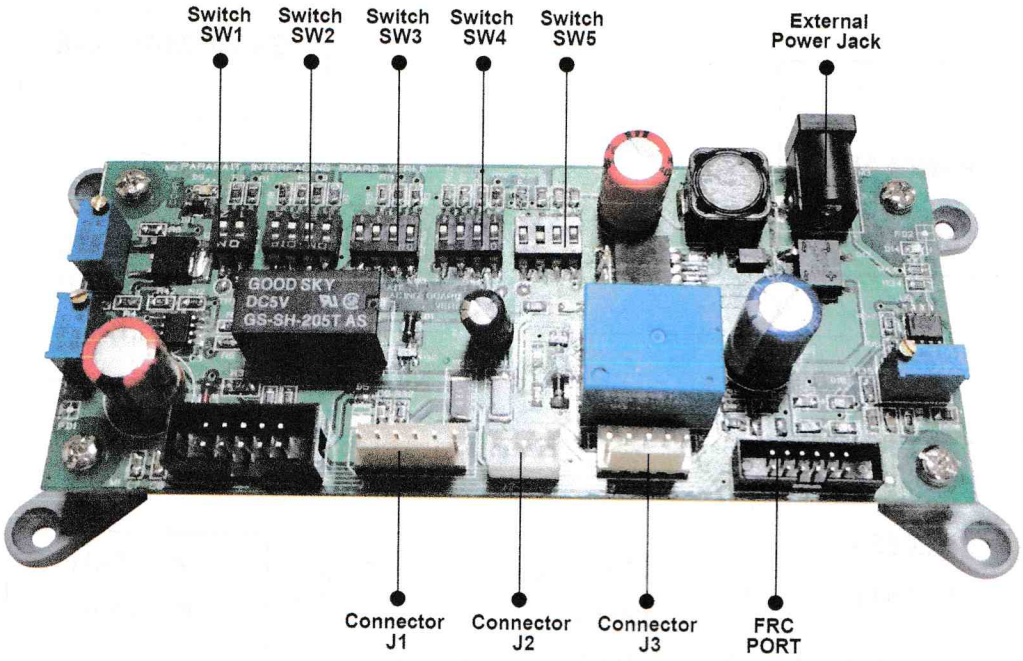
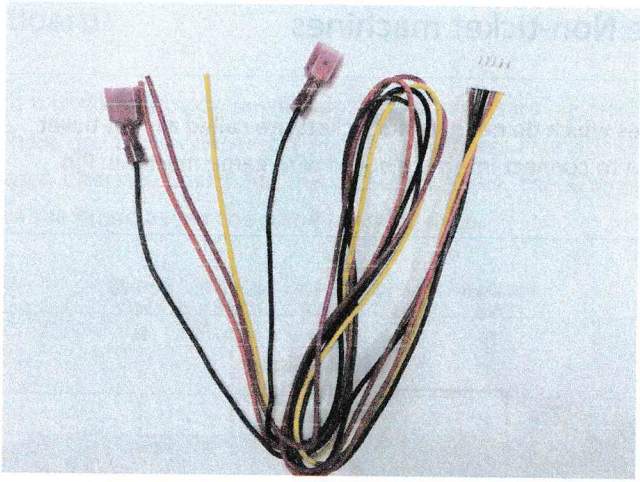
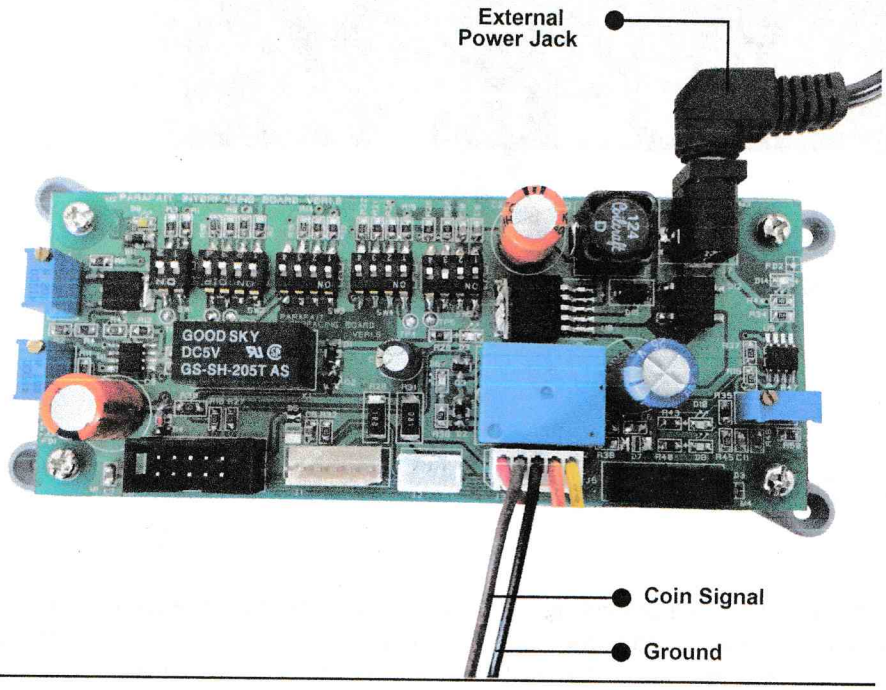




In case the game machine does not have 12V DC or is sensitive to the power being drawn by the reader, then the 12V DC adapter has to be used. The 12V DC adapter can be connected to the "External Power Jack" provided in the interface board. Please note that in such cases, Ground of the interface board should be connected with Ground on the game machine side using spade connector.



Determining when to use the 12V DC Adapters

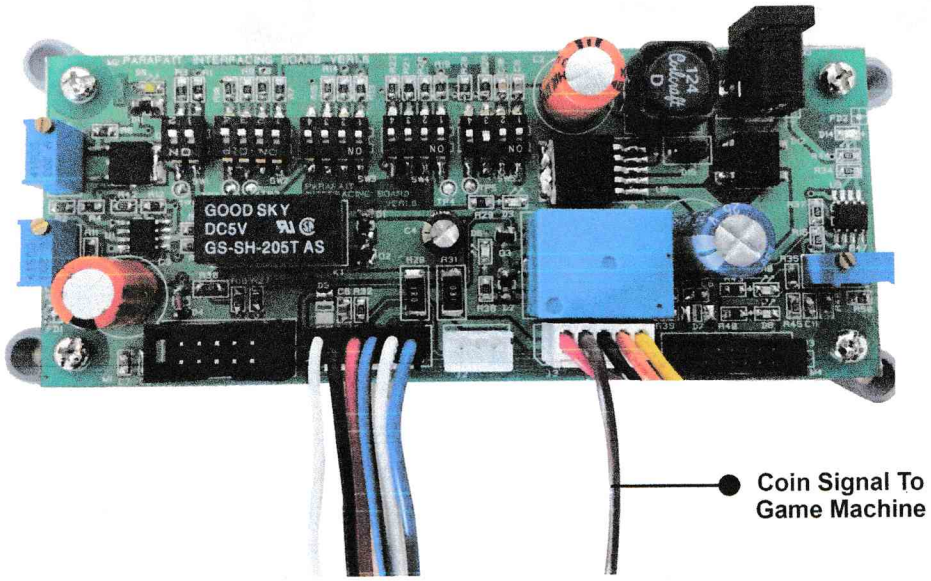
There are two common scenarios wherein the 12V DC adapter might need to be used

a. The game machine operates on 5V DC (found in some kiddie rides) and hence 12V DC is not available
b. The game machine power is not sufficient to run the Parafait reader - This occurs when the game machine starts the game play or issues tickets. In those cases, if the game machine requires more power (to dispense the tickets), then the game reader display becomes dim as the power is not sufficient. If this is noticed, then the power should be given by the external adapter.

Connecting Interface Board to Ticket Machines

Game machines such as the Basket Ball, Hit-a-Mouse, Slam-a-Winner,etc. which give out tickets after the game play are called ticket machines.

Connector J1 in interface board is used for connecting ticket lines to the interface board. Connector J3 is used to connect coin signal. Detailed pin description is as given below.



Pin Description of J1

Pin 1(Striped White - Black stripes): Ticket Enable input from game machine
Pin 2(Black): Ground
Pin 3(Red): 12VDC
Pin 4(Striped Blue - Black Stripes): Ticket notch output to game machine
Pin 5(White): Ticket Enable Input to ticket dispenser
Pin 6(Blue): Ticket Notch Output from ticket dispenser

Pin Description of J3

Pin 2(Brown) : Coin Signal (This pin is connected to common pin of the relay)

Ticket Harness

DIP Switch Settings

Switch setting for coin signal generation

SW5:

Different machines use different coin signal generation logics to initiate the game play. Based on this logic dip switch SW5 needs to be set.

	SW5.1	SW5.2	SW5.3	SW5.4	Explanation
SW5	ON	OFF	OFF	OFF	Coin signal is generally 0V. Making it 5V will trigger the game play.
	OFF	ON	OFF	OFF	Coin signal is generally 0V. Making it 12V will trigger the game play.
	OFF	**OFF**	**ON**	**OFF**	**Default setting.** Coin signal is generally either 5V or 12V. Making it ground will trigger the game play. Most of the machine work with this logic.

Switch setting for ticket interface:

These switches are by default left in OFF position. Changes in these switch settings are required only when there is problem in ticket generation. SW1, SW2, SW3 and SW4 are used to isolate the noise in ticket input (Ticket Enable Input) and Ticket Notch Output signals. Also, please note that when turning on a switch, remaining switches should be in off position.

SW1:

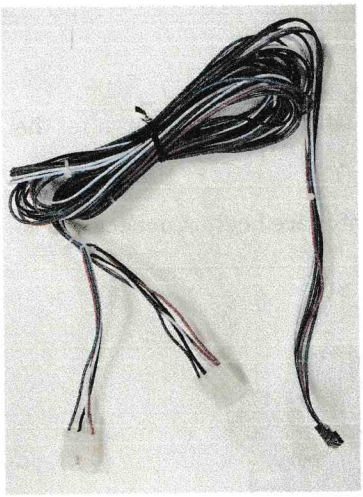
In e-Ticket mode reader will generate Ticket Notch Output pulses (e-tickets) and send to game machine. In some machines Ticket Notch Output signal generated by the reader is not recognized by game machine. Reader would continuously generate electronic tickets until it reaches jackpot amount. In such cases changes in SW1 is required to give voltage pull up to Ticket Notch Output pulses.

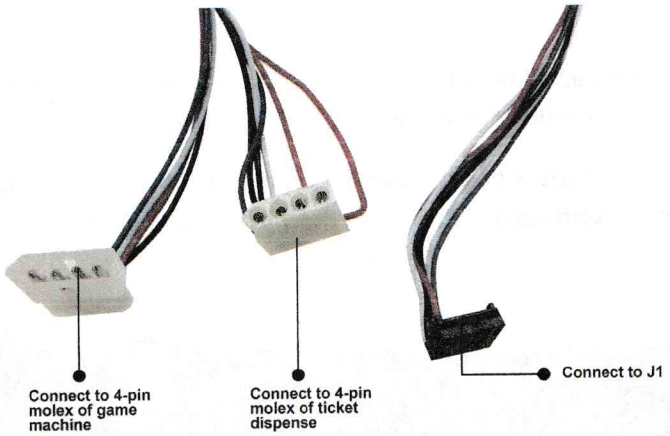
In case the customer operates in physical ticket mode, this switch setting is not relevant.

	SW1.1	SW 1.2	Explanation
SW1	**OFF**	**OFF**	**Default setting.** Change is not required unless there is issue in ticket update, usually when reader continuously updates e-tickets after game play.
	ON	OFF	5V pull up for Ticket Notch Output signal in e-ticket mode
	OFF	ON	12V pull up for Ticket Notch Output signal in e-ticket mode.

SW2:

In order to isolate the noise in input (Ticket Enable Input) signal SW2 is used. By default all switches are kept in OFF position. Changes are needed when the reader is




Connect to 4-pin molex of game machine
Connect to 4-pin molex of ticket dispense
Connect to J1

1. Continuously updating e-tickets when the reader is turned on.
2. Continuously updating tickets when the card is tapped.
3. Not updating any tickets after game is over.

	SW2.1	SW2.2	SW2.3	SW2.4	Explanation
	OFF	**OFF**	**OFF**	**OFF**	**Default Setting**
SW2	ON	OFF	OFF	OFF	To give 12V pull up to Ticket Enable Input signal
	OFF	ON	OFF	OFF	To give 5V pull up to Ticket Enable Input signal
	OFF	OFF	ON	OFF	Ground using 10K ohm resistor
	OFF	OFF	OFF	ON	Ground using 4.7K ohm resistor

SW3:

This switch is when the machine is operated in e-ticket mode and physical ticket dispenser unit is still connected with the machine. During such cases the ticket dispenser will be open circuit. This may lead to continues dispensing of physical tickets from the dispenser. So to terminate, SW3 switches should be set. As a first step, need to check the default Ticket Enable Input signal; after identifying the default Ticket Enable Input signal, set SW3 switches either as pull up or pull down mode according to game machine voltage logic.

	SW3.1	SW3.2	SW3.3	SW3.4	Explanation
	OFF	**OFF**	**OFF**	**OFF**	**Default setting**
SW3	ON	OFF	OFF	OFF	Set this when Ticket Enable Input is normally 12V.
	OFF	ON	OFF	OFF	Set this when Ticket Enable Input is normally 5V
	OFF	OFF	ON	OFF	Ground using 10K ohm resistor
	OFF	OFF	OFF	ON	Ground using 4.7K ohm resistor

SW4:

This switch is useful only when the machine is operated in Physical ticket mode. This is useful when the physical ticket count in the reader is not updated correctly due to noises in Ticket Notch Output signal. As a first step, need to check the default voltage level of the output signal (Ticket Notch Output); after identifying the input signal, set the SW4 either pull up or pull down as per the game machine logic.

	SW4.1	SW4.2	SW4.3	SW4.4	Explanation
SW4	**OFF**	**OFF**	**OFF**	**OFF**	**Default setting**
	ON	OFF	OFF	OFF	To give 12V pull up of the Ticket Notch Output

					signal
	OFF	ON	OFF	OFF	To give 5V pull up to the Ticket Notch Output signal
	OFF	OFF	ON	OFF	Ground using 10K ohm resistor
	OFF	OFF	OFF	ON	Ground using 4.7K ohm resistor

a. J3 Connector (Pin 2 – Coin Signal) - This connector is used to connect to the coin hopper shown above. On tapping the card on the game reader, the pulse is generated for the hopper to drop the token. The customer then uses this token to play the fast action game. Also, Ground (Pin 3 – Black) from interface board is connected with Ground of the Hopper to make the grounds common.

b. J2 Connector (Pin 2 – External Input) - This connector is used to connect the coin pulse line of the game machine to the Parafait interface board. When the customer drops the token into the game, a pulse is generated which is captured and counted.

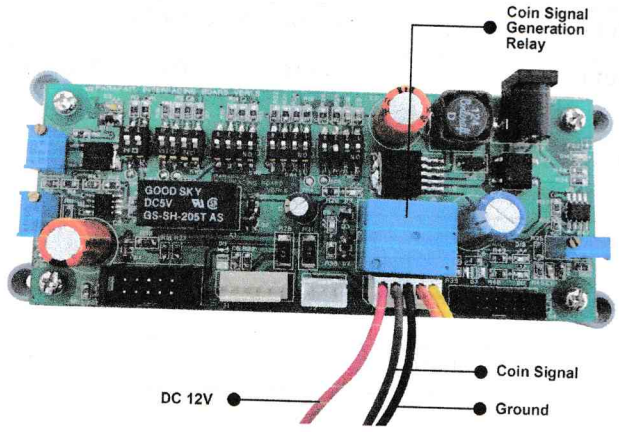
Follow below explained connection details, related to the J2 connector:

Pin-2 (Brown) - External input. Coin signal from gamemachine

Note: In server, in reader parameter 'Coin Pusher' should be enabled for corresponding machine.

Connection Summary

Not Ticket Dispensing, Not Hopper machine

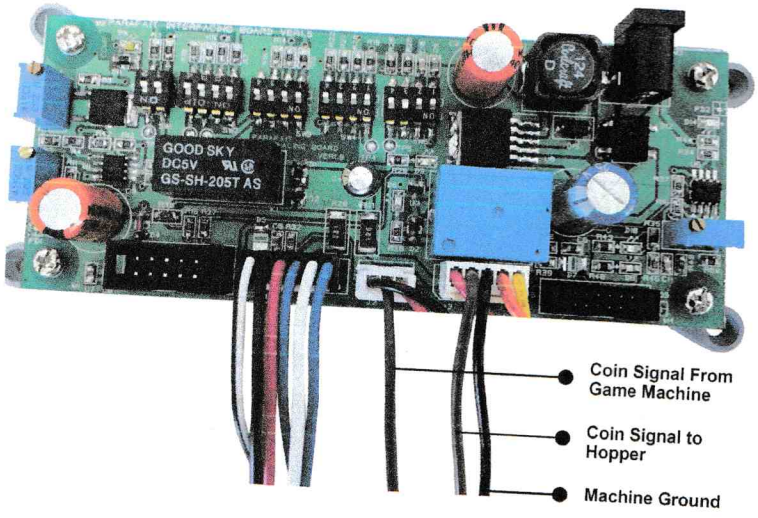


Connector	Pin Number	Connection Type	Connected To
J1	Not used		
J2	Not used		
J3	Pin 1 (Red)	Butt connector	12 VDC from game machine
	Pin 2 (Brown)	Spade Connector (Male)	Coin signal to game machine
	Pin 3 (Back)	Spade Connector (Male)	Ground from game machine.

Connecting interface Board to quick- coin games

Games such as, Basket Fortune, Smokin-Token need tokens to play. A device called coin-hopper will be installed on these games with card reader for customers to obtain tokens by tapping the card on card reader.

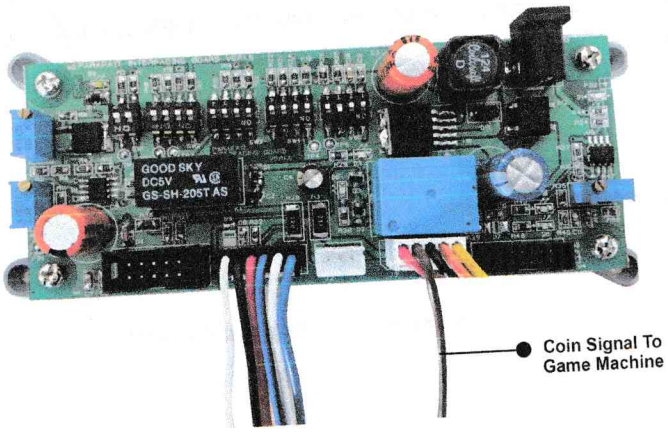
This device needs 12Volt to function; 12 Volt power will be obtained from either game machine or using 12V DC adaptor. Ground of the interface board should be connected with Ground of the Hopper board. This device takes the coin pulse from the interface board and dispenses one token. In order to connect Parafait interface board to coin-hopper, follow the connection procedure of redemption game machine.



Further, reader should count the tokens inserted to determine number of plays. For this purpose, the J2 connector is used. When the token is dropped in, the coin pulse line of the game machine will get a trigger. This is captured and based on this signal, the hopper game play is selected. So in summary

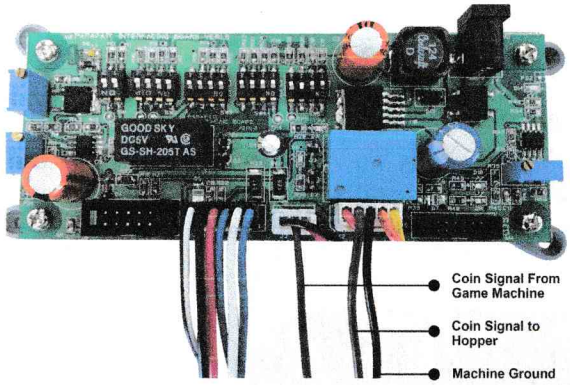
	Pin 4 (Orange)		Not used
	Pin 5 (Yellow)		Not used

Ticket Dispensing, Not Hopper Machine



Connector	Pin Number	Connection Type	Connected To
J1	Pin 1 (Striped white – Black Stripes)	Ticket Harness	Ticket enable input from game machine
	Pin 2(Black)	Ticket Harness	Ground from game machine
	Pin 3(Red)	Ticket Harness	12VDC from game machine
	Pin 4(Striped Blue – Black Stripes)	Ticket Harness	Ticket notch input to game machine
	Pin 5(White)	Ticket Harness	Ticket enable input to ticket dispenser
	Pin 6 (Blue)	Ticket Harness	Ticket notch output from ticket dispenser
J2	Not used		
J3	Pin 1 (Red)		Not used
	Pin 2 (Brown)	Spade Connector (Male)	Coin signal to game machine
	Pin 3 (Back)		Not used
	Pin 4 (Orange)		Not used
	Pin 5 (Yellow)		Not used

Ticket Dispensing Hopper Machine



Connector	Pin Number	Connection Type	Connected To
J1	Pin 1 (Striped white – Black Stripes)	Ticket Harness	Ticket enable input from game machine
	Pin 2(Black)	Ticket Harness	Ground from game machine
	Pin 3(Red)	Ticket Harness	12VDC from game machine
	Pin 4(Striped Blue – Black Stripes)	Ticket Harness	Ticket notch input to game machine
	Pin 5(White)	Ticket Harness	Ticket enable input to ticket dispenser
	Pin 6 (Blue)	Ticket Harness	Ticket notch output from ticket dispenser
J2	Pin 1(Red)		Not used
	Pin 2 (Brown)	Butt connector	Coin signal input from game machine
	Pin 3 (Black)		Not used
J3	Pin 1 (Red)		Not used
	Pin 2 (Brown)	Spade Connector (Male)	Credit Out pin of the Hopper
	Pin 3 (Back)	Spade Connector (Male)	Ground of the Hopper
	Pin 3 (Orange)		Not used
	Pin 4 (Yellow)		Not used

PLAY PASS READER INSTALLATION MANUAL

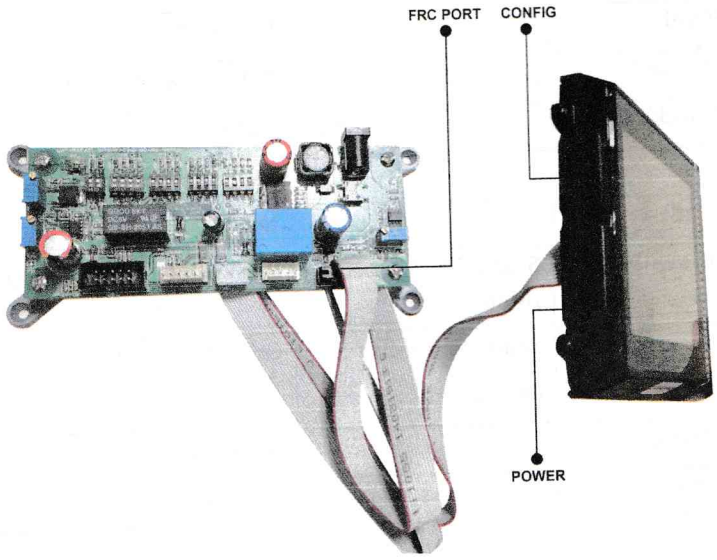
Reader Installation and configuration

Reader Functionality

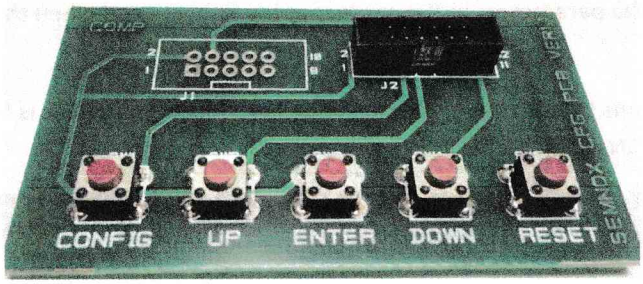
Card Reader is used as interface between the guest, game machine and the server. It generates the commands necessary to communicate with the Access Point wirelessly, pulses necessary to initiate game play and manages the tickets (in case of physical tickets, it counts the tickets so that the ticket pay-out is available and in case of electronic tickets, it generate the required pulses for the game machines).

Hardware connections

Power: This connector connects reader to interface board.
Config : 12 Pin FRC connector from Configuration Keyboard which is used for configuring the reader



Configuration Settings



Configuration PCB

Reader has configurable parameters which help to make the reader fully-fledged for all scenarios. Plug the configuration keyboard and follow the below mentioned steps

1. Press Reset button on the configuration Tool
2. Keep pressed Config Button till display shows the Config Screen
3. To navigate through the parameter list use UP & DOWN Buttons
    a. As you press the UP/DOWN button, the parameter will keep changing
4. To edit a particular parameter select the parameter by pressing the ENTER Button,
    a. Once the parameter has been selected for updated, the value can be changed using the UP & DOWN Buttons.
5. Once you have set the parameter to correct value, press ENTER. This will save the particular parameter value and allow you to go back to STEP 3
6. Once all the parameters are configured to correct value, to save the parameters press CONFIG Button followed by ENTER Button. "CONFIG SAVED" message is displayed; this indicates that all the Configuration parameters have been successfully updated.
7. Press RESET Button to make the updated parameters to effect in reader functionality.

Reader configuration

Setting up the wifi communication

The wifi communication is setup by programming the reader to the SSID and Password of the access point. This is done via the configuration PCB. Connect the configuration PCB to the reader. Press reset button once and hold the config button to enter into configuration mode.

1. Go to frequency parameter by pressing the UP button.
2. Set the frequency to 2 (press enter and up or down to change the values).
3. Press Config and Enter button to save the newly set parameter.

Now reader will be configured to

SSID - Parafait_2 and
Password – <<>>

All the readers shipped are pre-configured to SSID Parafait_2. This step should not be necessary.

Note: All the parameters other than Hub, Mac Address and Frequency are controlled from the server. You should NOT setup the parameters in the readers as it will be erased when the server sends the values.

There are some exceptions to this rule. It is detailed below. General guidance is "DO NOT UPDATE ANY PARAMETER OTHER THAN FREQUENCY".

Parameters	Value	Meaning	Remarks
Hub	X		Not relevant in CEC
Mac Address	X		Not relevant in CEC
Frequency	X		Frequency corresponding to SSID setup. **The value at CEC is 2. That is the system is configured to connect to Parafait_2** **If this value is anything other than 2, the reader will not work and has to be changed to 2.**
Start Tic Mode	0	E-Ticket	To setup the start ticket mode.
	1	Real Ticket	
Number of coins	X		To setup the number of coins required to activate the machine. **The number of coins is by default 1. But CEC does have photo booth, which is configured to take 2 tokens.**
Coin Pulse Width	X	Defines the coin pulse width	Depends on the game machine Default Value : 6 **In most cases it is 6 but it has been found that some machines need it to be 3. In case the relay is clicking and the game machine does not start, you can change the coin pulse width to 3 and try.**

Tic Pulse Width	X	Defines the Ticket pulse width	Depends on the game machine Default Value : 6
Coin Pulse Gap	X	Time interval between coin pulses	Depends on the game machine Default Value : 6
Tic Pulse Gap	X	Time interval b/w tickets	Depends on the game machine Default Value : 6
Sensor Interval	X	Time period of validating Ticket Notch Output pulse with respect to Ticket Enable Input interrupt	Depends on the game machine. Default Value : 10
Display Dir	0	Straight align	Alignment of the 3.5" LCD display.
	1	Reverse align	
Ad show static	0	To show dynamic image sent from server.	When Ad show static is 1 only static image are shown, dynamic image sent from server are not shown.
	1	To show static image in theme.	
Ticket Delay	X	Delay before analysing the ticket input logic after power up	The processor is faster than machine, this parameter is used to delay the processor so that it waits for the machine to be fully up Default Value : 1
Default Theme	00	Default theme number of the machine	The theme of the machine will be default theme when the theme no is not valid
Theme no	X	Theme number of the machine	Theme number will be sent from the server. If this theme doesn't exist default theme is taken. Following are the theme numbers relevant to CEC

			Theme No: 1 - Standard CEC theme **Theme No: 2 - Out of service CEC theme** **Theme No: 4 – Check Balance Theme** **Theme No: 5 - Portrait CEC theme** **Theme No: 6 - Portrait CEC Out of service theme.** **Theme No: 7 - Free Play theme** **Theme No: 8 – Free Play portrait Theme** **Theme No: 9 - Half price theme** **Theme No: 10 - Half price portrait theme**
Ticket Eater	0	Normal Reader	Reader can be attached to ticket eater machine to count the tickets fed into the s/m.
	1	If reader has to act like a Ticket Eater	
Card Interval	X	Minimum time within which a card has to be tapped for the ticket eater.	Default value can be 45. Needs to be set only for Ticket Eater
Timer Interval	X	Minimum time within which tickets had to be fed to the ticket eater device after card swipe	Default value can be 45. Needs to be set only for Ticket Eater
Start Screen	0	For ticket eater machine Start screen has to be 3	Ticket eater theme is 6 and start screen has to be 3 (MESSAGE_SCREEN)
Coin Machine	0	Normal Machine	
	1	For Coin Only Machine	

Tic Disable	0	Ticket Enable Input Interrupt enabled for ticketing	Tic Disable is set to 1 for game machine that doesn't have ticket dispenser
	1	Ticket Enable Input interrupt disabled	
Balance Delay	XX	Balance message display time	In the multiple of 500 ms, determines how long the balance screen should be displayed
Reset Pulse			
Card Retries	XX	Number of times the card is retried	Controls how many times the card number is sent to the server, once tapped, if there is communication failure.
Display Lang	XX	Language displayed on reader	Controls the language of the text on the reader
Watchdog Dly	XX	Watchdog delay	Controls the watchdog delay interval
Debug	XX	Debug mode	Controls the level of debugging. 0 – No debug messages 1, 2, 3, 4 – Various debug levels
Anim Stop	0/1	Animation Ticket Enable Input	When set to 0, the animation occurring on the reader can be stopped
Act Value	0/1	Value of the Ticket Enable Input signal level	1 – Normal state of the Ticket Enable Input signal is high. 0 – Normal state of the Ticket Enable Input signal line is low
Sensor Value	0/1	Value of the Ticket Notch Output signal level	1 – Normal state of the Ticket Notch Output signal is high. 0 – Normal state of the Ticket Notch Output signal line is low

Check Act	0/1	Whether Ticket Enable Input signal should be checked	0 – Ticket Enable Input signal should not be checked during booting 1 – Ticket Enable Input signal should be checked during booting
Check Sensor	0/1	Whether Ticket Notch Output signal should be checked	0 – Ticket Notch Output signal should not be checked during booting 1 – Ticket Notch Output signal should be checked during booting
AD Delay	XX	Advert delay	Controls the delay of the advertisements shown on the reader
Check Balance Type	XX	Type of check balance reader	As there are different types of check balance, this controls the type
Fast Boot	0/1	Fast booting of the reader	If Fast boot is set to 1, then the reader will not show any boot messages. This is to speed the booting.

In the latest version 4 parameters of very high significance has been introduced. With the ticket problems occurring because of the levels being read when the machine is giving ticket error, these parameters have been introduced.

Check Activation, Check Sensor – These parameters control if the Ticket Enable Input line and the Ticket Notch Output line have to be read when the reader is booting. Setting this to 1 will cause the readers to read the Ticket Enable Input and Ticket Notch Output signal lines and store the levels.

Act Value and Sensor Value – This stores the value of the Ticket Enable Input line and the Ticket Notch Output line. If the "Check Ticket Enable Input" and "Check Ticket Notch Output" are turned on – set to 1, then values set in these fields are immaterial as it will be overridden during booting. Otherwise, you can hold the levels by setting these fields and then switching off Check Ticket Enable Input and Check Ticket Notch Output – setting it to 0.

In addition, when the reader is taken to "Config Mode", it checks the signal levels and stores the same in "Act Value" and "Ticket Notch Output Value". Further it sets the Check Ticket Enable Input and Check Ticket Notch Output to 0 so that the levels do not get modified. Hence, if you would like to continue to check the Ticket Enable Input and Ticket Notch Output signals at each boot, then forcibly set the "Check Ticket Enable Input" and "Check Ticket Notch Output" to 1.

SD Card and Theme

The reader is versatile in displaying various screens per the customer's requirements. In case of CEC, there are two themes, the normal mode theme and the "Out of service" theme.

Further, the there are different theme numbers for the portrait mode.

Mode	Theme Number
Landscape - Normal CEC	1
Landscape - Out of service	2
Portrait - Normal CEC	5
Portrait - Out of service	6
WIFI config mode	0
Free Play - Landscape	7
Free Play - Portrait	8
Half Price - Landscape	9
Half Price - Portrait	10

The theme is composed of number of files like the images, fonts, language files etc. All these are stored in the SD card inside the reader.

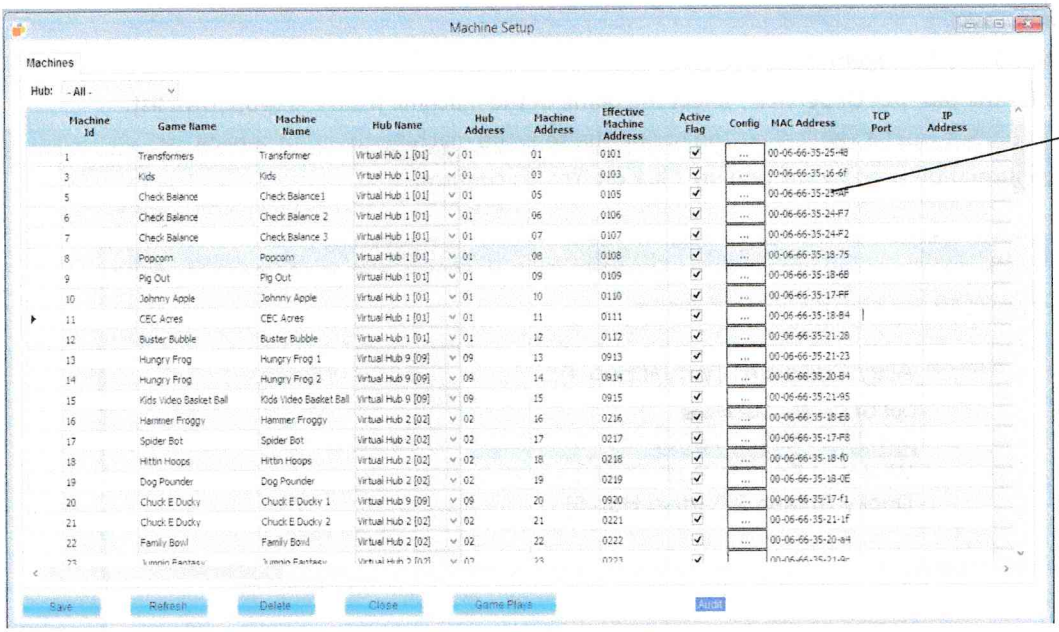
Each theme is identified by a theme number. Based on the setting in the server, the theme number gets transmitted to the reader and that particular theme is shown.

Settings in Server

After installing the readers, all the readers should be entered in server. Each reader has a unique number called MAC Address. A sticker with MAC address is stuck on each reader. Make a note of MAC address of all the reads with name of games. Follow this procedure to enter the MAC address of the reader in server.

- Log into Parafait Management Studio
- Open 'Games' Menu
- Open 'Machines' screen

You will have the below shown screen opened.



After entering the MAC Addresses, save and close the Machines screen.

Testing

Turn on Parafait Primary Server; after showing up the Wireless Window in server screen, the price required to play the game should be displayed on card reader screen if the reader communicates with server through WiFi access point.

Issue a card with some balance and physical ticket mode enabled (By default mode of ticket is set to physical ticket); tap this card (as shown in the above diagram) and play games. In case of redemption Games, observe whether the number of physical tickets dispensed and tickets count shows on the card reader is in sync.

Messages:

The below gives you the clear information about messages displayed.

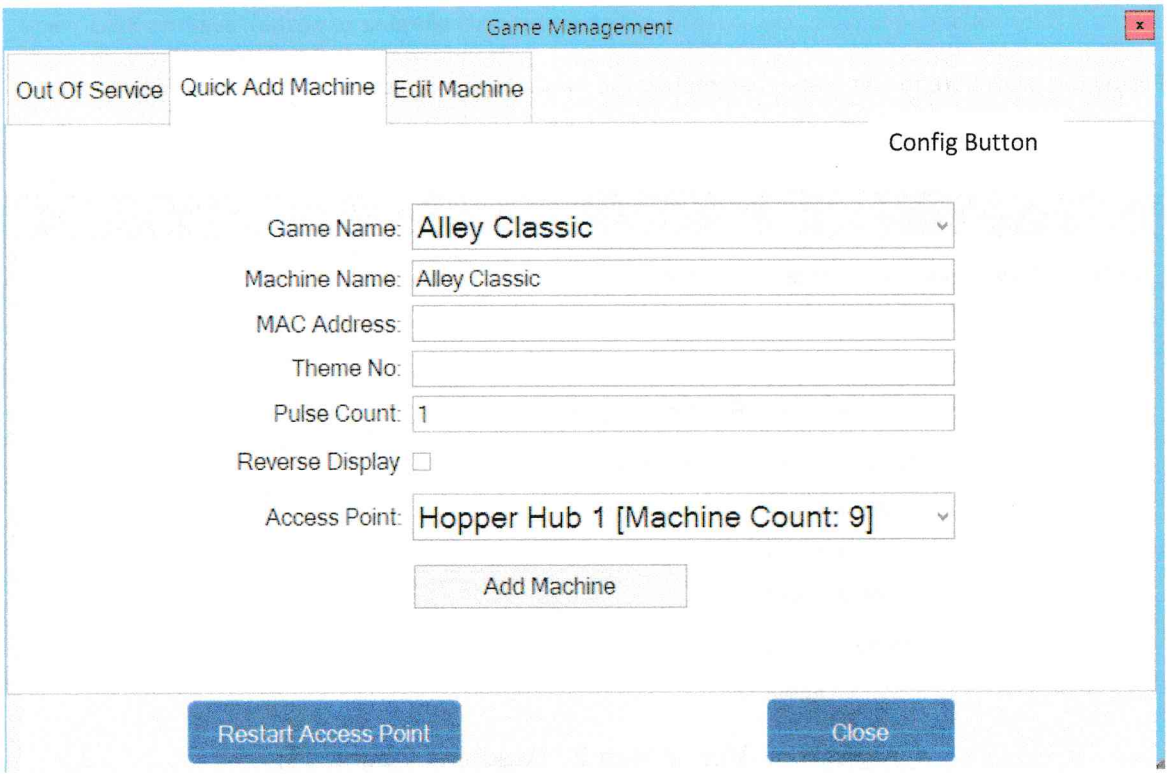
Messages	Descriptions
Play Points : xx	Shows the points required to play the game. This value is taken from the server.
Play Pass Read **Processing ...**	Validating the Play Pass Swipe. This indicates that the Play Pass has been read and is being validated at the server
Balance : XXX.XX **Play Game. Enjoy...**	Have sufficient points to play game, shows the amount remaining in the card. Game machine is activated
Invalid Play Pass **Please Retry**	Play Pass is not valid, please check with the cashier
Low Balance **Please recharge**	Play Pass doesn't have sufficient balance, it needs to be recharged.
Tickets updated **Play your way**	Ticket updated at the server. The tickets are recorded against the Play Pass used to play the game.
Time Remaining **XX Mins XX Secs**	For timer based machines, message gives you the remaining time. Not relevant in CEC
Time left: XX Secs **Pleases tap Play Pass...**	For Ticket Eater, Time left out to swipe card to load the Counted ticket to server. User has provision to feed the tickets and then swipe the card. Once the last ticket is fed, the reader shows amount of time the user has to tap the card. Otherwise, the tickets counted are abandoned (as there is no card to associate with)
Checking Balance **Please tap Playpass**	For Check Balance, Customer can check the status of the Card. Gives the details of Credits, Courtesy, Bonus, Tickets, Games, Time Remaining. Please contact Semnox to set the reader as Check Balance.
Playpass Read **Checking Balance...**	For Check Balance, checking the status of the card at the server.
Balance: XX	For Check Balance, Balance values of the card.

Removing machines from out of service list

- Log into Parafait Manager Terminal.
- Open Tasks.
- Open Game Management.
- Under the tab 'Out Of Service', machines that are set to out of service are listed.
- Select the name of the machine which needs to be removed from out of service list. Note the hub number of the machine. Click on the button 'Remove From List' at the bottom.
- Reader will show the normal theme in less than a minute.

Add a new machine

Follow these steps to create a new machine in server when new machines have arrived at the store.



- Log into Parafait Manager Terminal.
- Open Tasks.
- Open Game Management.
- Open the tab 'Quick Add Machine'.
- Game Name: Select the name of the game from the list. If the Game Name is not available in the list please contact semnox support team.

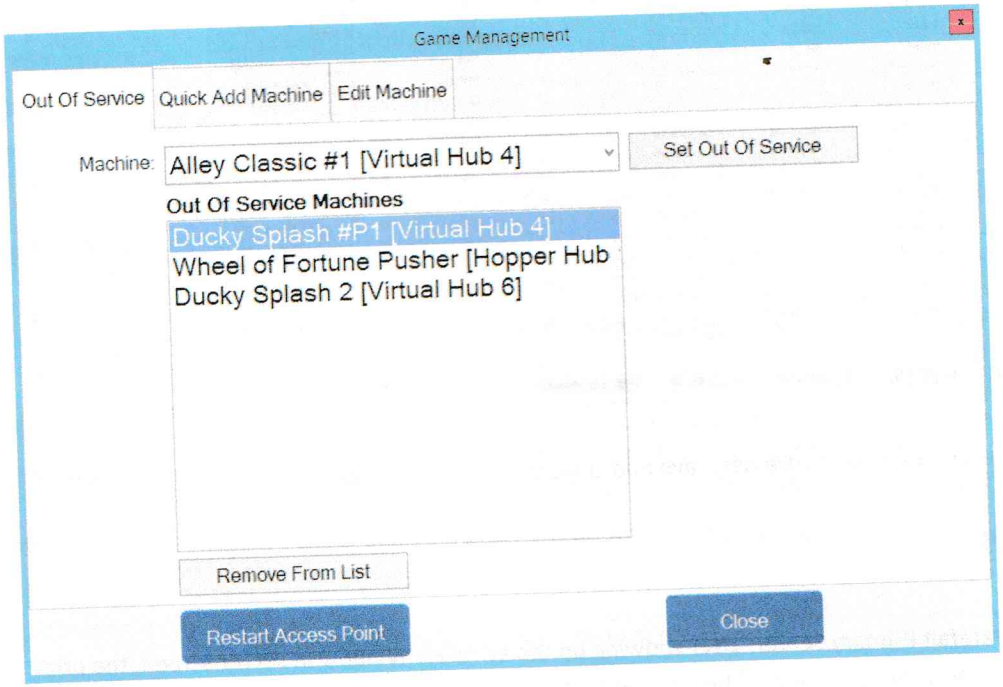
Convert the card from physical ticket mode to E-Ticket mode. Tap on card reader to play games. Observe whether e-ticket is updated on card properly. In this test, game machine should not show Ticket Error. While playing with card with E-Ticket mode is enabled, physical tickets will not be dispensed.

Out Of Service

Setting machine out of service

Follow this procedure to show the Out of Service Theme on the reader if game machine is out of service.

- Log into Parafait Manager Terminal.
- Open Tasks.
- Open Game Management.
- Under the tab 'Out Of Service', select the name of the machine from the dropdown list.
- Click on 'Set Out Of Service' button to add the selected machine to out of service list.
- A confirmation window will pop up. Click on 'Yes' to confirm.

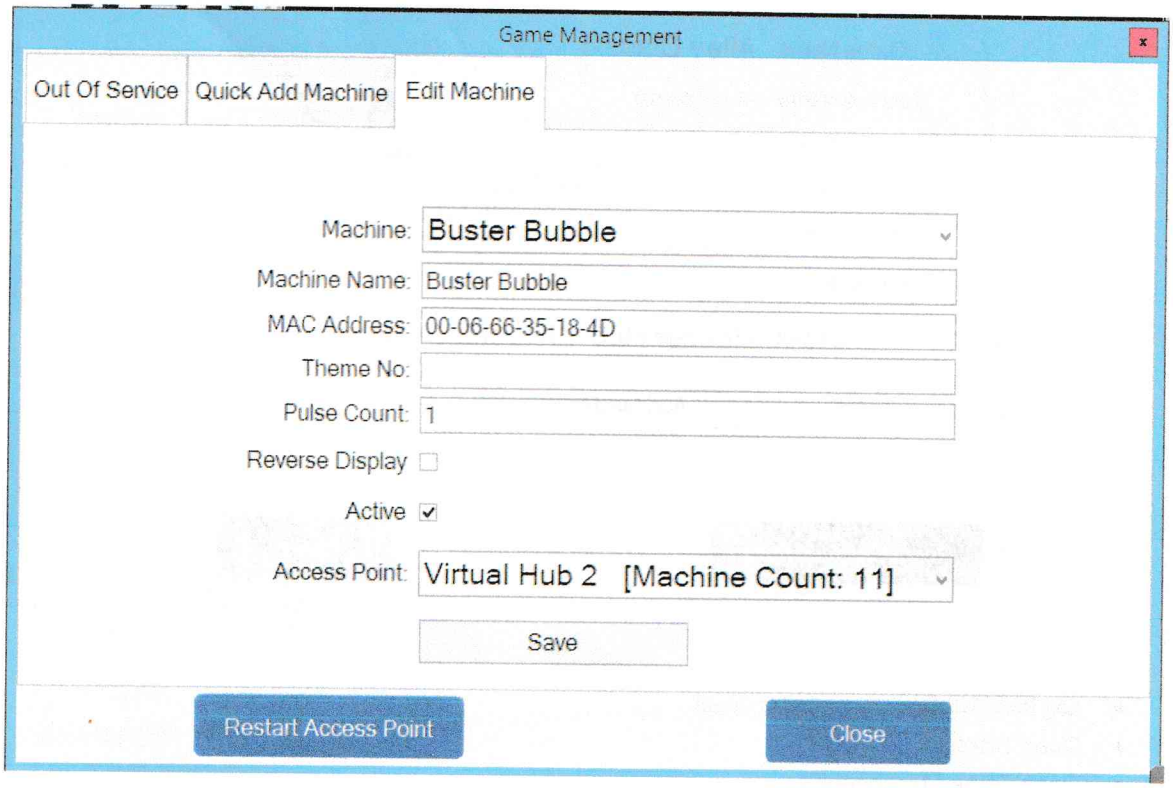


- Note the Hub number of the machine. For example, in the above screen Ducky Splash #P1 is under Hub number 4.
- Click on Restart Access Point button. This will show a list of available Hubs.
- Select the Hub number to which out of service machine is assigned.
- Hub window will be set to restart immediately. Out of service theme should be displayed in the machine in less than 1 minute.

- Machine Name: Enter unique name of the machine.
- MAC Address: MAC of the reader installed in the machine.
- Theme Number: This is 1 for normal readers. 5 for vertically installed reader.
- Reverse Display: This is to reverse the display direction of the reader.
- Access Point: Select a hub number from the list. Make sure that hopper machine is added to Hopper hub.
- Click on the button 'Add Machine'.
- Restart the corresponding hub number by using the button 'Restart Access Point'.
- Newly added reader should start communicating with server and display appropriate Play Points in less than a minute.
- Power cycle the reader once to save the newly added values.

Edit Machine – Replacing reader MAC in server

Follow this procedure to edit reader parameters like MAC, Display Direction, Theme number etc.



- Log into Parafait Manager Terminal.
- Open Tasks.

- Open Game Management.
- Open the tab 'Edit Machine'.
- Machine: Select the name of the machine from the list. Once selected, values saved for the selected machine will be displayed.
- Machine Name: Name of the machine saved in server. Change the name is required.
- MAC Address: MAC of the existing reader. Change the MAC if reader needs to be replaced or if the existing MAC is incorrect.
- Theme No: Theme number of the reader. This value is 1 for normally mounted readers and 5 for vertically mounted readers.
- Pulse Count: Number of coin pulses. Mostly it is 1. Some machines like CEC Photobooth which operate with 2 tokens require 2 pulses.
- Reverse Display: This is to reverse the display direction of the reader.
- Active: Decides if the machine is active in server.
- Access Point : This is to move the machine from existing Virtual hub to a new Virtual hub. This is needed only when the existing virtual hub is over loaded.
- Click on 'Save' button to save the changes made.
- Restart the corresponding Virtual Hub by using the button 'Restart Access Point'. If the machine is moved from one virtual hub to other, please note that both virtual hubs need to be restart one after other.
- Power cycle the reader to apply the changes made. 'Reverse Display' this change needs reader to be power cycled 2 times.

Debugging Card reader

1. Reader display white/black/stopping at boot messages/stopped Animation – This usually happens if the connector is not connected properly or crimping of the FRC cable has problems.
    a. Disconnect the "Power FRC" cable and connect it back. Make sure that the FRC connector is fully pushed in.
    b. If still not working, take a different FRC cable and use that as the Power FRC. If this solves the problem, then the issue is with the FRC cable crimping.
    c. Open the reader, the reader has an SD card inside it. Please remove the SD card and put it back and close the reader.
    d. If still not working, then replace the reader.

2. Card reader not working – The card reader module has gone defective or there is power issue
    a. Disconnect the "Power FRC" cable and connect it back. Make sure that the FRC connector is fully pushed in.
    b. If still not working, then replace the reader.

3. Reader not showing the price – This happens because the reader is not able to communicate with the server.

Troubleshooting Level 1

Step 1. Connect the config board to the reader.
Step 2. Press "Reset" and keep holding "Config" button. This will get you into the configuration of the reader. This is called the "CONFIG" mode.
Step 3. Check the parameter - "Frequency"
Step 4. Change the Frequency to 2 if not 2 already. This is via the UP and DOWN button on the Config board.
Step 5. The screen will show number of commands running, it is configuring the wifi board. At the end the reader will restart automatically.
Step 6. Leave it for 5 minutes. Reader should display play points in 5 minutes.
Step 7. Remove the Config board from the reader. Close the "CONFIG" port using the stopper.
Step 8. Close the reader

Troubleshooting Level 2

Step 1. Connect the config board to the reader.
Step 2. Press "Reset" and keep holding "Config" button. This will get you into the configuration of the reader. This is called the "CONFIG" mode.
Step 3. Change the parameter - Theme = 0. This is via the UP and DOWN button on the Config board.
Step 4. Reset the reader and keep holding the "UP" button. This is via the UP and DOWN button on the Config board. This is called the "GET" mode.

Step 5. You will see the "Maroon" screens, this is the setup screens. If you do not see the maroon screen, then the "THEME" setting to 0 has not been successful and you have to go to step 2

Step 6. Navigate through the parameters, you will see the parameter

1. Mac Id - Verify if the MAC printed on the reader = mac in get mode = mac entered in management studio.

2. Verify the value for the parameter IF, it should be showing UP. This means that the reader has connected to the wifi network. If IF is DOWN, you need to go to "Advanced Debugging"

Step 7. Press the RESET button

Step 8. Verify if the Mac Id is entered correctly in the server

Step 9. Wait for 10 mins. The server will attempt to connect to the reader

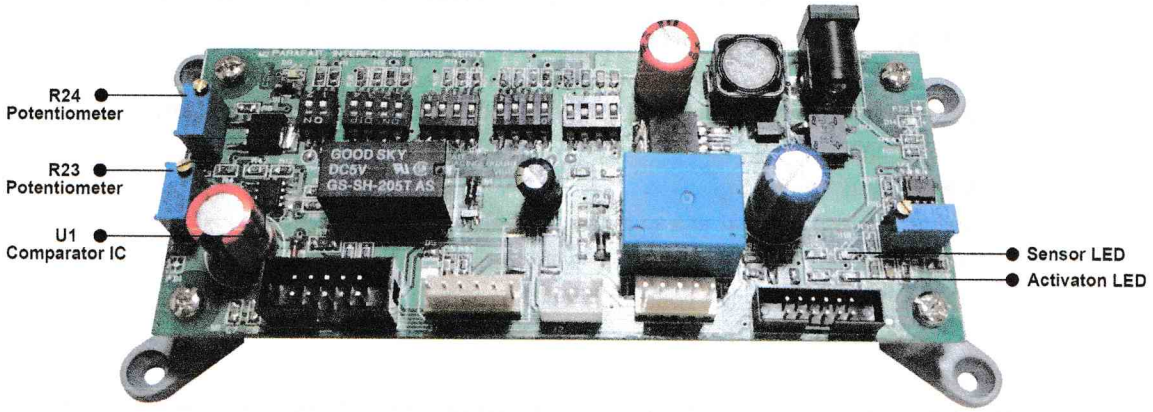
Step 10. If it still does not connect, then the reader is likely to be defective.

4. On tap, balance deducted but game machine not starting – This is because the coin pulse is not received by the game machine
    a. Check if relay tripping sound is heard from interface board. If there is no sound, then check if the FRC cable from the reader to the interface board is connected properly. If relay is tripping then proceed with other testing.
    b. Make sure that the coin pulse line of the interface board is connected to the game machine coin pulse line
    c. Check if modifying the "Coin Pulse width" and "Coin pulse gap" parameters help. Most of the CEC game machines have the Coin pulse width of 6 but some of them have found to be 3 (smaller pulses)
    d. If not, replace the interface board and check if the problem is resolved
    e. If not, replace the reader and check if the problem is resolved.

5. On tap, balance deducted but incorrect credits given in the machine – This is because the coin pulse setting is not correct
    a. Check the "Number of Coins" parameter in the server, verify if the setting is correct
    b. Verify the setting within the machine, what does one coin pulse corresponds to within the machine. Ensure that the machine setting is appropriate.
    c. If it does not resolve, replace the interface board and check if the problem is resolved
    d. If not, replace the reader and check if the problem is resolved

6. Reader not showing the tickets – This is because the reader is not getting the ticket signals from the game machine.
    a. Check if the "Ticket Ticket Enable Input" and the "Ticket Ticket Notch Output" lines are properly connected from the interface board to the game machine.
    b. Verify if the switch settings are proper. The switching settings are in page 20.
    c. If it does not resolve, replace the interface board and check if the problem is resolved
    d. If not, replace the reader and check if the problem is resolved

Debugging Ticket Issues



U1 Comparator IC – PIN Numbers

1. Reader is showing the ticket count incorrectly, showing very high ticket count – This is because, the settings related to the tickets is not set properly.

   Note the change in Ticket Enable Input (D8) and Ticket Notch Output (D10) LEDs in Parafait interface board while tickets are dispensing. Ticket Enable Input (D8) is motor enable signal. This LED should switch for as long as tickets are dispensing. Ticket Notch Output (D10) is ticket output pulse. This LED should toggle for as many times as number of tickets are dispensing.

   Condition 1 : Ticket Enable Input LED (D8) is not switching when the tickets are dispensing -

   Check the change in Ticket Enable Input voltage (Pin 1 of J1 connector) when the tickets are dispensing. Most of the cases Ticket Enable Input changes from 0V to 5V. In rare cases, it can be 5V/12V to 0V change.

Case 1 : Ticket Enable Input changes from 0V to 5V.

Check the reference voltage in PIN 3 of the comparator IC (U1). Set the voltage to 3.6V by rotating potentiometer R24. Once set, play the game again and confirm that the Ticket Enable Input LED switches when ticket is dispensing.

Case 2 : Ticket Enable Input changes from 5V/12V to 0V.

Check the reference voltage in PIN 3 of the comparator IC (U1). Set the voltage to 1.6V by rotating potentiometer R24. Once set, play the game again and confirm that the Ticket Enable Input LED switches when ticket is dispensing.

Condition 2 : Ticket Notch Output LED (D10) is not toggling when tickets are dispensing.

Check the change in Ticket Notch Output voltage when the tickets are dispensing. Most of the cases, Ticket Notch Output changes from 5V to 0V. In rare cases, it can be 0V to 5V/12V change.

Case 1 : Ticket Notch Output changes from 5V to 0V.

Check the reference voltage in PIN 5 of the comparator IC. Set the voltage to 1.6V by rotating potentiometer R23. Once set, play the game again and confirm that the Ticket Notch Output LED toggles when ticket is dispensing.

Case 2 : Ticket Notch Output changes from 0V to 5V/12V.

Check the reference voltage in PIN 5 of the comparator IC. Set the voltage to 3.6V by rotating potentiometer R23. Once set, play the game again and confirm that the Ticket Notch Output LED toggles when ticket is dispensing.

Condition 3 : Ticket Enable Input LED is switching and Ticket Notch Output LED is toggling when ticket is being dispensed. But reader is not counting the tickets correctly.

Step 1 : Connect the configuration board to the reader. Enter config mode. Navigate through the parameters using UP or DOWN buttons. Set the values for following parameters if it is not set already.

Check Act = 0
Check Ticket Notch Output = 0

These 2 parameters make sure that correct value of Ticket Enable Input and Ticket Notch Output references are saved in the reader. Save and exit by pressing CONFIG and ENTER button in config board. Play a game and confirm that the reader is counting correct tickets.

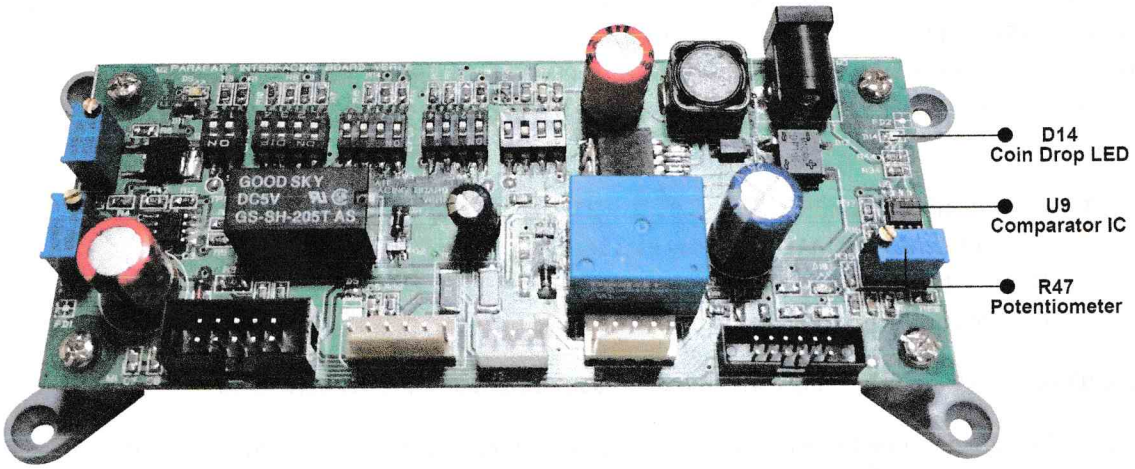
Step 2 : Connect the configuration board to the reader. Enter the config mode. Navigate through the parameters using UP or DOWN buttons. Check if the value for the parameter TIC DISABLE = 0. If this is set to 1, this parameter needs to be changed from Management Studio. Please contact Semnox for this.

2. Reader showing ticket count correctly but not updating tickets in server – This is because the communication between the server and the reader is not proper.
    a. Verify if the communication is stable by monitoring the hub communication window
    b. If it does not resolve, replace the reader and check if the problem is resolved.

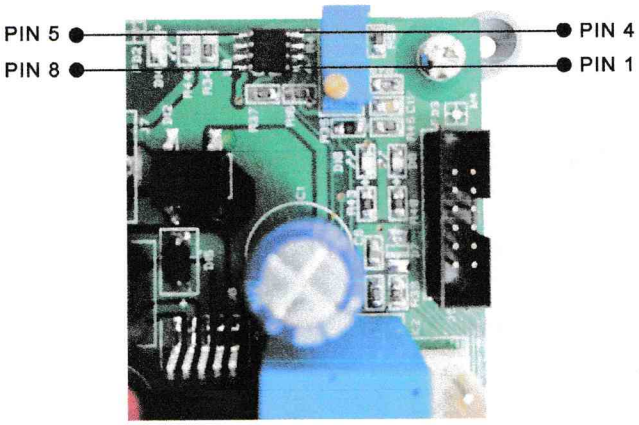
If in any of the cases, after doing the diagnostics as mentioned under the problem header, the problem does not get resolved, please contact Semnox support immediately.

Note: If the reader is replaced, the MAC address of the new reader should be entered in the server. Restart the wireless hub window of Primary server in which the reader replaced machine is allocated.

Debugging Hopper Issues



U9 Comparator IC – PIN Numbers



1. Hopper game machine is accepting the token but the reader is not counting the gameplays.

The D14 LED in the interface board indicates the number of tokens inserted. This LED should toggle as many times as the number of tokens inserted.

Condition 1 : D14 LED is not blinking.

Step 1: Check if the connection is made as per the manual. Game machine and the Interface board should have the common ground connection. Check if this resolves the problem. If not, move to step 2.

Step 2: Check the voltage at PIN 3 of the comparator IC(U9). This should be 2.5V. If not, change the voltage to 2.5V by rotating the potentiometer R47. Power cycle the interface board and check if this resolves the issue. If not, move to step 3.

Step 3: Check the change in voltage of the coin signal from the game machine. Most of the cases it should be normal 5V to 0V when the token in inserted. In rare cases, there is a chance that the voltage toggles between 5V to 2V. In such cases, set the voltage at PIN 3 of the comparator IC (U9) to 3.5V. Power cycle the interface board. Check if this resolves the issue. If not, contact Play Pass support team with following details.

- Store name and number.
- Machine name and MAC if the Play Pass reader.
- Normal state voltage of the coin signal.
- Change in voltage when the token is dropped.

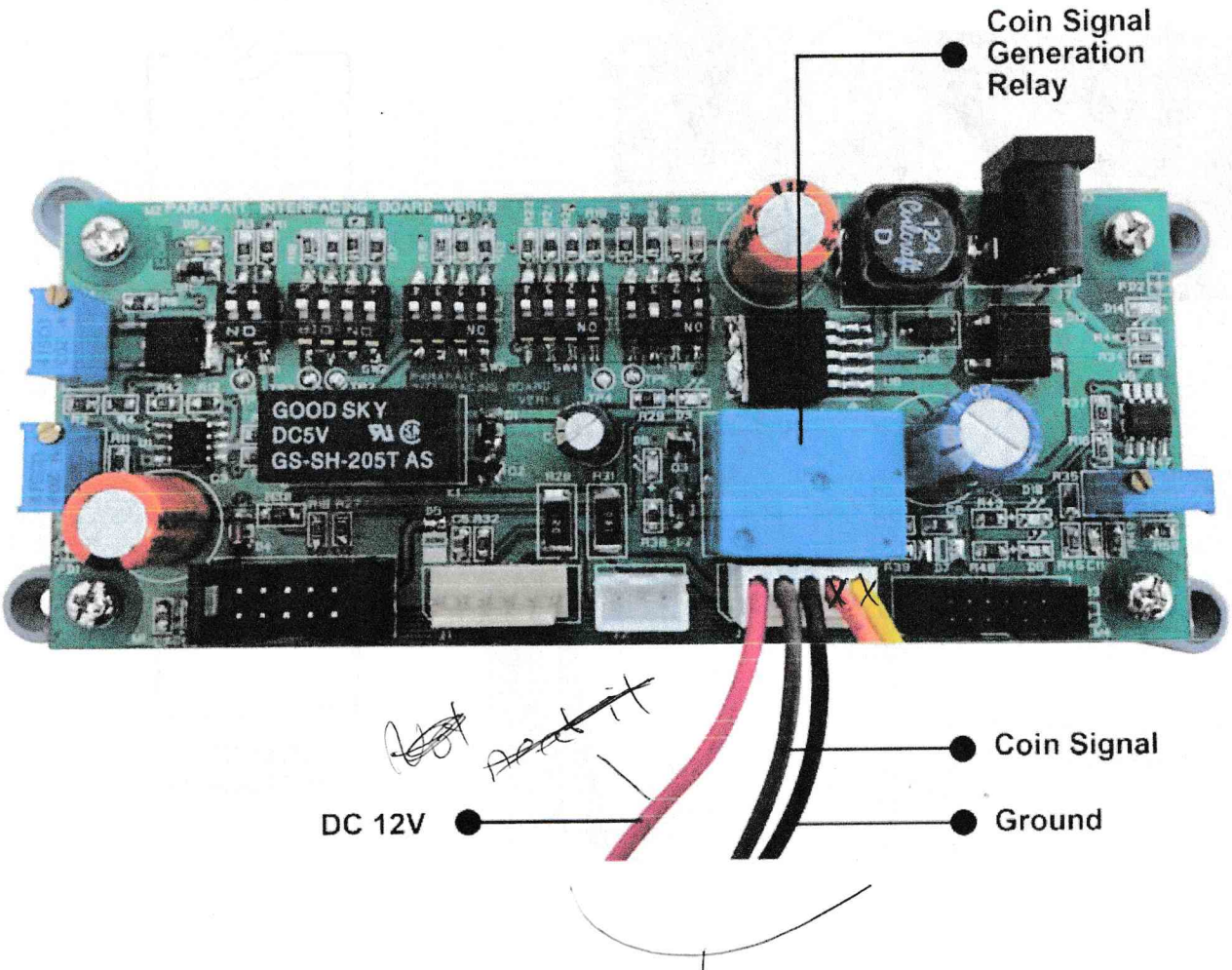
Condition 2: D14 Led is blinking correctly, but reader is not updating the play count.

Step 1: This could be due to defective FRC that connects reader to Interface Board. Replace the FRC and check if this resolves the problem. If not, move to step 2.

Step 2: Take the reader to configuration mode. Navigate through the parameters using 'Up' and 'Down' buttons. Check if the value for the parameter 'Coin Machine' is set to 1. If otherwise, change this to 1 from Management Studio. Please note that this value needs to be changed and hub window needs to be restarted. Confirm that the value is updated in the reader by taking the reader to Configuration mode. Check if this resolves the issue. If not, contact Play Pass support team with following details.

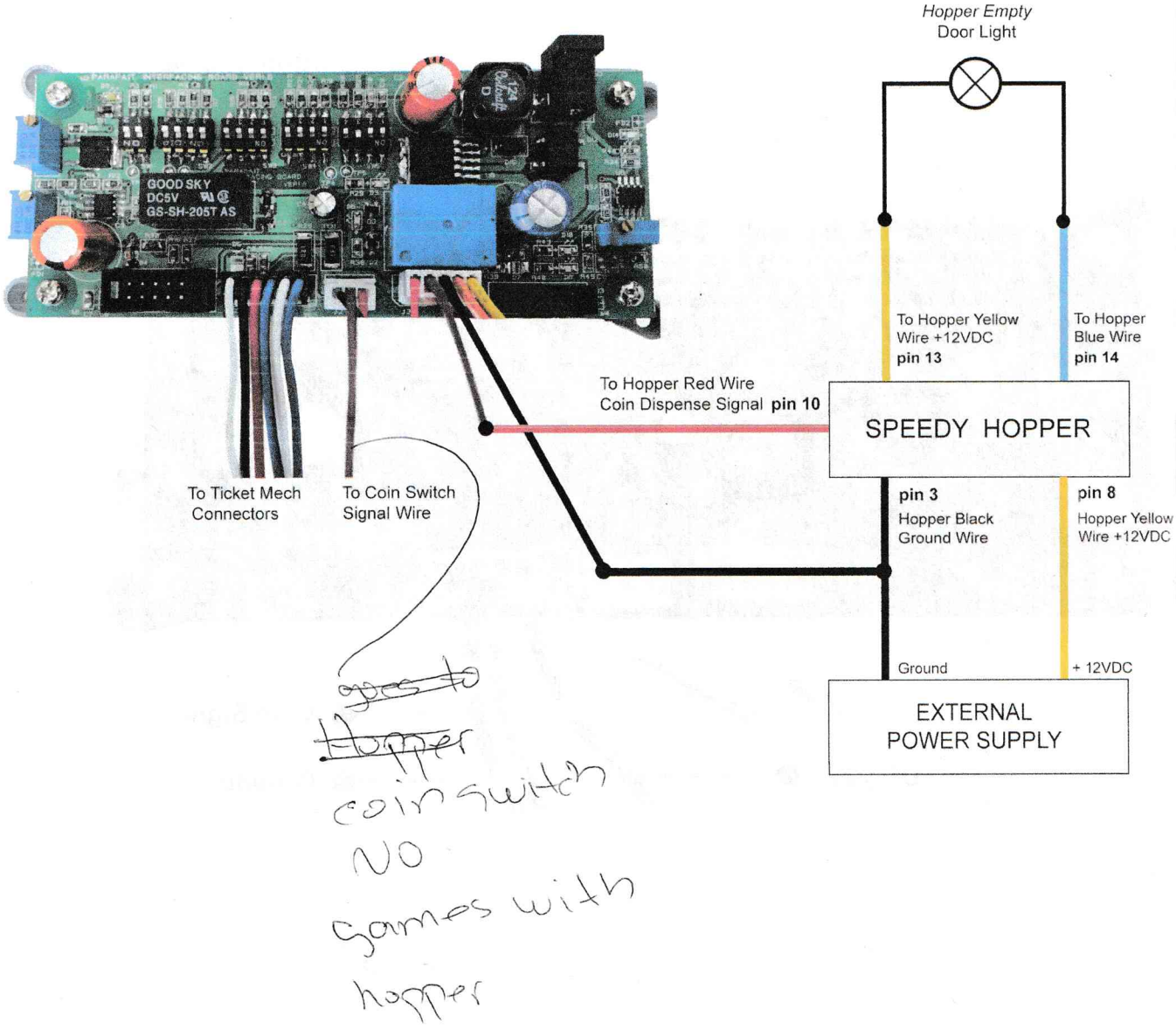
- Store name and number.
- Machine name and MAC if the Play Pass reader.

Connecting interface board to the Non-ticket machines

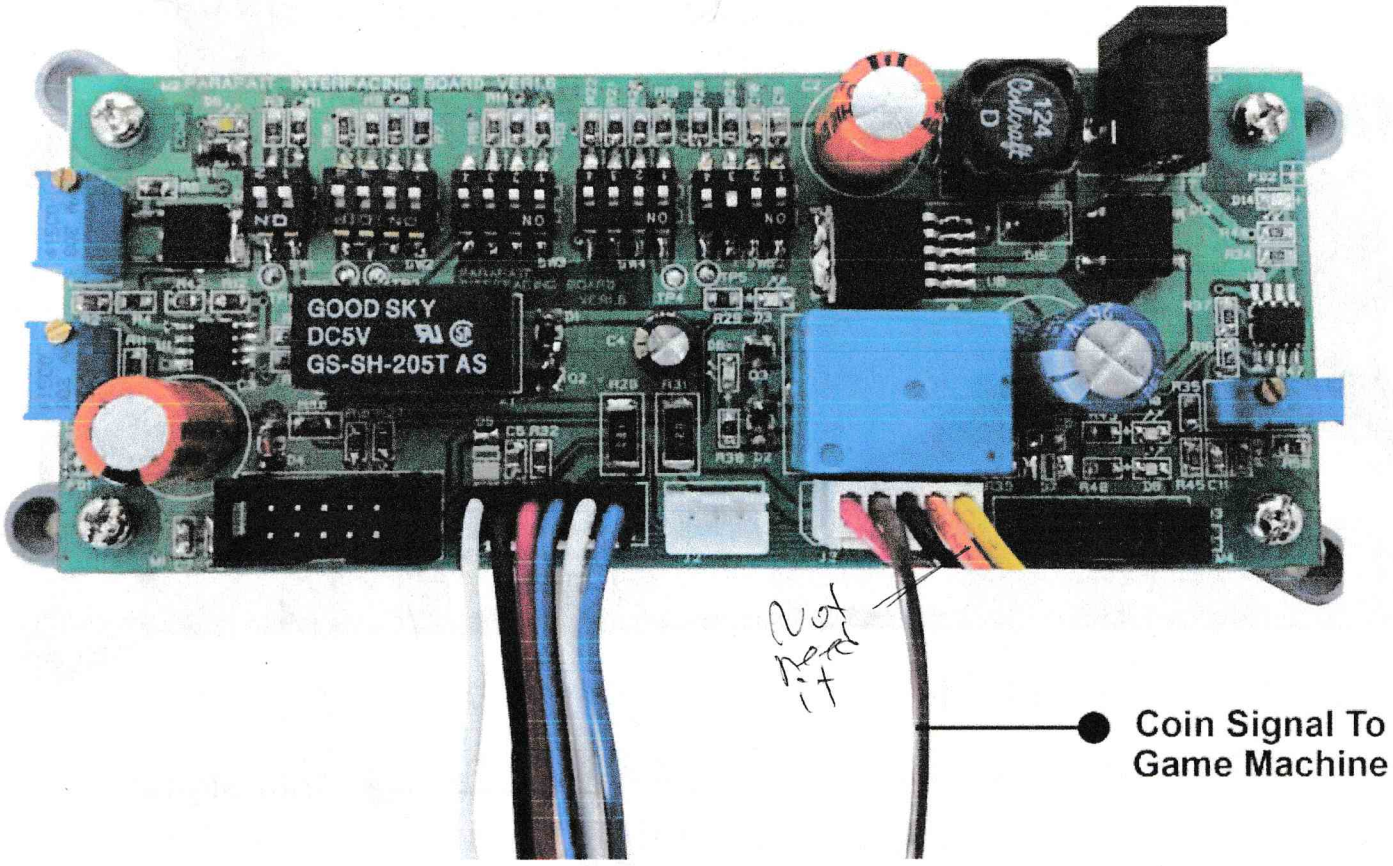


Non tickets d... games.

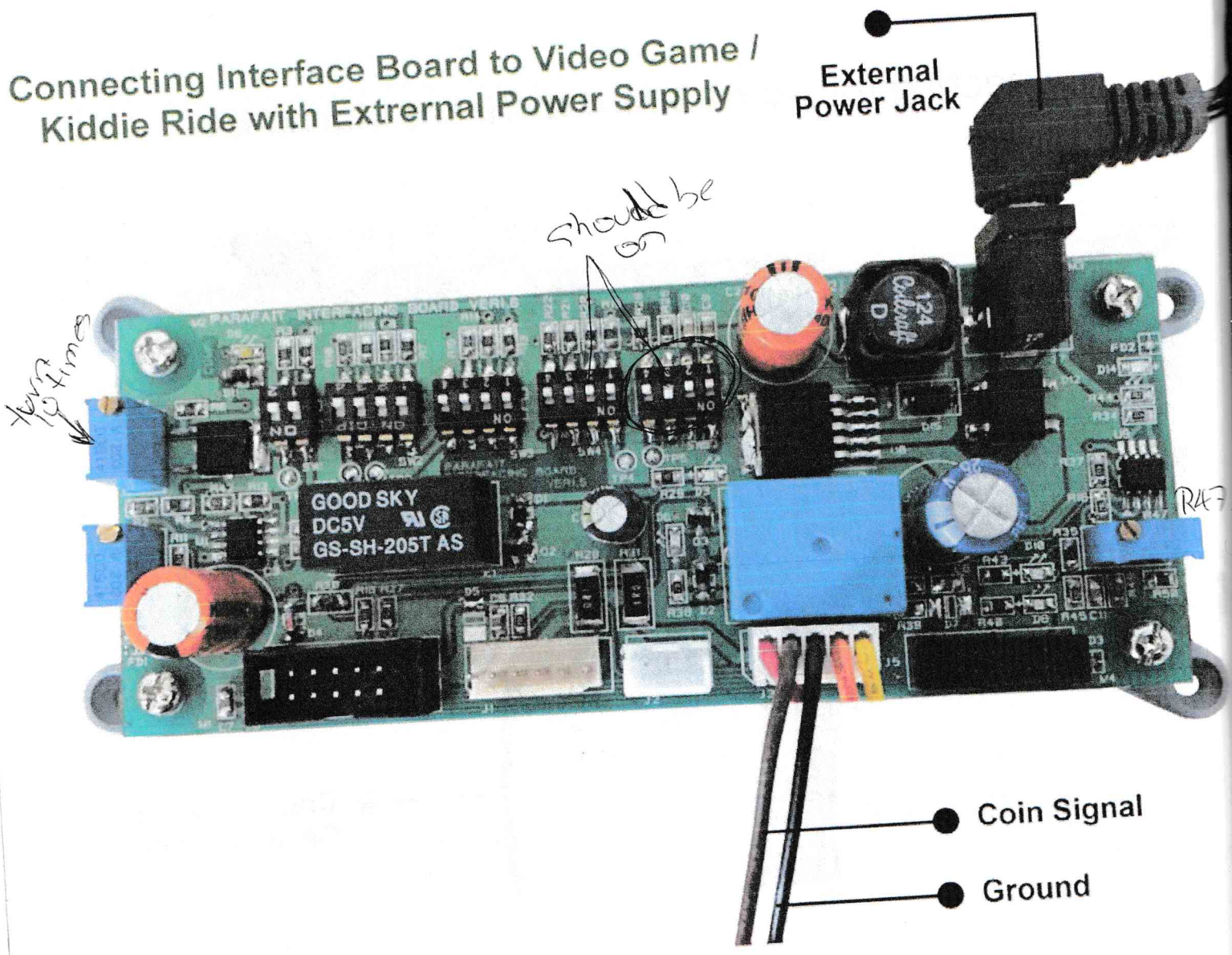
Connecting Interface Board to Hopper Games



Connecting Interface Board to Ticket Machines



Connecting Interface Board to Video Game / Kiddie Ride with Extrernal Power Supply



How to Adjust Ticket Output

Overview on ticket operations:

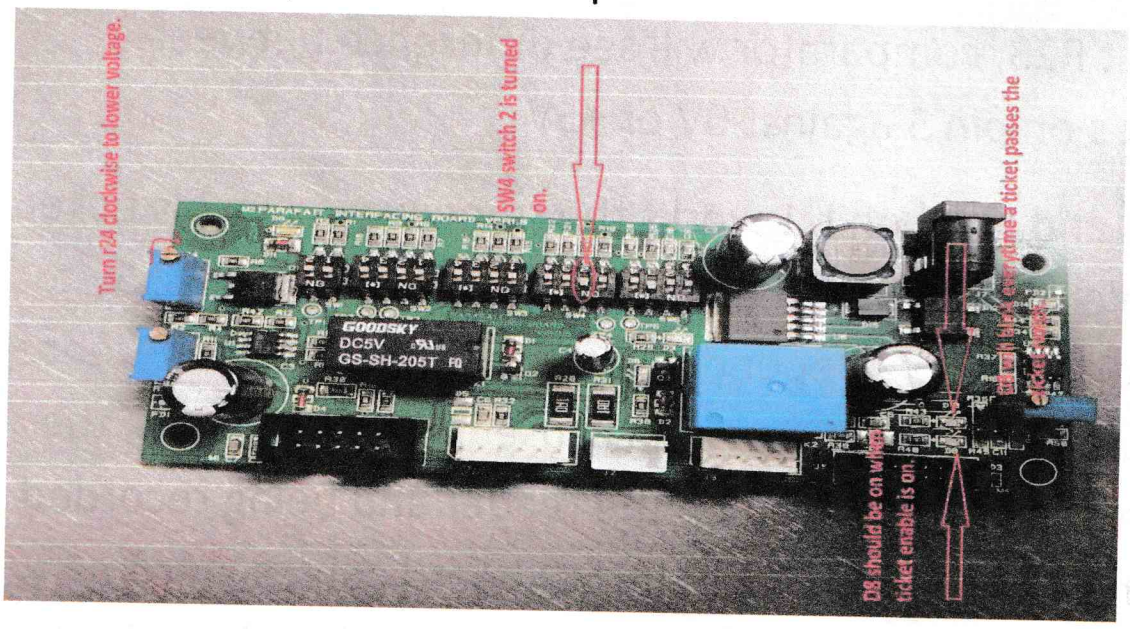
U1 is a comparator. It looks for a difference on its inputs and passes the signal when it see a difference. Pin 5 and Pin 6 are the inputs for the ticket notch. When SW4 switch 2 is turned on, it keeps +5V on ticket notch input when ticket board has no voltage due to open collector. So when the tickets are dispensing, voltage goes from high to low and the comparator see this. No need to adjust R23, comparator will see difference between what's on pin 5 against 0V or +5V.

Pin 3 and Pin 2 on U1 works the same way. Pin 2 is ticket enable. When the tickets are running, you'll have 2.5v to 5v going to Pin 2 depending on the game. This difference in voltage is one of the main cause of problems with the tickets being displayed on the reader and being recorded on the TPP report. Since the I/O board comes in from factory at 3.6v on Pin 3, if the ticket enable voltage is at 3v (pin 2) then the comparator won't see the difference and won't record the tickets on the display. If a game has a ticket enable of 5v's then the comparator will see the difference between the 3.6v and this is why some

games do record the tickets on the display. Since we have difference games with different volts, the safe bet is to adjust Pin 3 (r24) down to 1.6v to 2v. This will ensure the comparator see's the difference.

Step 1.

SW4, switch 2 – turn on. Power off I/O board and Power back on. Does it count on reader display? If so, done. If not, proceed to step 2.


Turn r24 clockwise to lower voltage.
SW4 switch 2 is turned on.
GOODSKY
DC5V
GS-SH-205T
D8 should be on while ticket enable is on.

Step 2.

R24 – turn clockwise 10 full turns if it hasn't been adjusted prior. Most I/O boards come in pre-adjusted at 3.6v so 10 full turns will get you at 2v to 1.6v. If it's been

adjusted prior, take voltage reading at U1 pin 3. Adjust r24 until you get a reading of 2v to 1.6v.

Step 3.

Power off and on I/O board. Test game. You should get tickets being counted on your reader display. If you still don't have tickets showing on the reader display, go to step 4

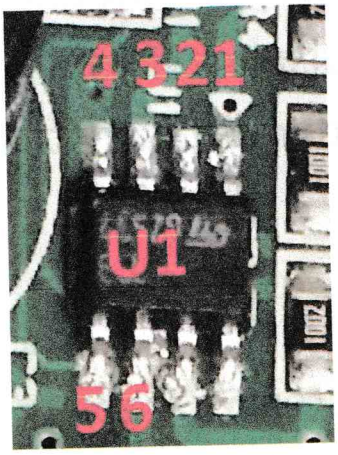
Step 4.

Unhook ticket mech from the Play Pass system (pre play pass setup). Measure voltage between the black and white wires in the ticket mech while it's running. Whatever high voltage you get, adjust r24 to half that. ex: If you measure 10v on the ticket mech, adjust r24 to 5v. If you measure 2.5v, adjust r24 to .5v. Exceptions explains which ticket mechs and games could influence this.

Exceptions:

Baytek/Benchmark games: Some Baytek/Benchmark games has a low ticket pulse of 2.5v. In this case, you'll have to turn r24 down to .5v for the game to count correctly. This can be measured on U1 pin 3.

D Type ticket mechs from China (Ball Blast, Sideshow, Roll For Gold, etc.): Ticket pulse is 10v so r24 has to be turned *up* to 5v not turned down. So you would have to go counter clockwise.



How to Adjust Coin Input in Hopper Games Only

Overview on Semnox Board operation:

Semnox Interface Controller board receives a Coin Input signal from the a Hopper Game Coin Switch, that goes to Pin 2 of the J2 connector (Brown wire). Semnox Interface board is using U9 comparator to receive coin signal, to process and to inform Reader so it can report it.

U2 contains 2 comparators U9A and U9B as shown on the schematic diagram below. U9A monitors Coin signal and U9B monitors output of U9A. Each comparator looks for a difference on its inputs and generates the signal when it sees a difference.

U9A monitors coin signal, which is changing from 0V to the range from 1.8VDC to 5VDC on Pin 2, on Pin 3 it has a Trigger Level input from Potentiometer R47.

U9B on Pin 6 monitors signal of output of U9A pin 1 and compares it with a fixed level of 3.4VDC on Pin 5. The goal is to make sure that input on Pin 6 is changing from below 3.4VDC to over 3.4VDC when coin switch is on and off. Ideally we want it to be changed from near 0V to over 4VDC.

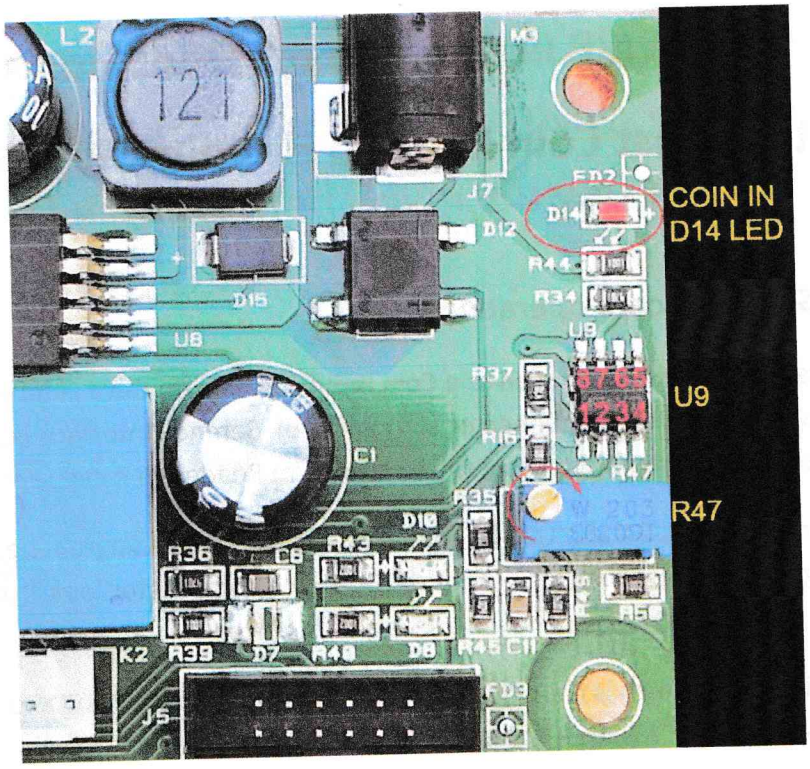
By adjusting R47 we can change voltage on Pin 3 to the level that will be in the middle of Hi and Low of Coin Input on Pin 2.

Example: Coin signal is Changing from 0V to 2.8VDC when coin switch on and off on Pin 2. We have 3.1VDC on Pin 3 and U9A is unable to see the difference on Pin 2, because 3.1VDC is not in the middle of a range of 0-2.8VDC. By adjusting R47 and bringing down voltage on Pin 3 below 2.8VDC to about 2.2VDC your coin signal will be registered by U9.

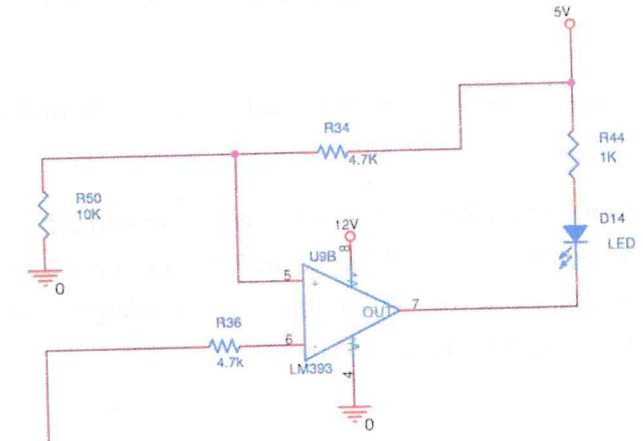
You should also confirm that Input of U9B on Pin 6 is going over and under of a fixed voltage of 3.4VDC on Pin 5.

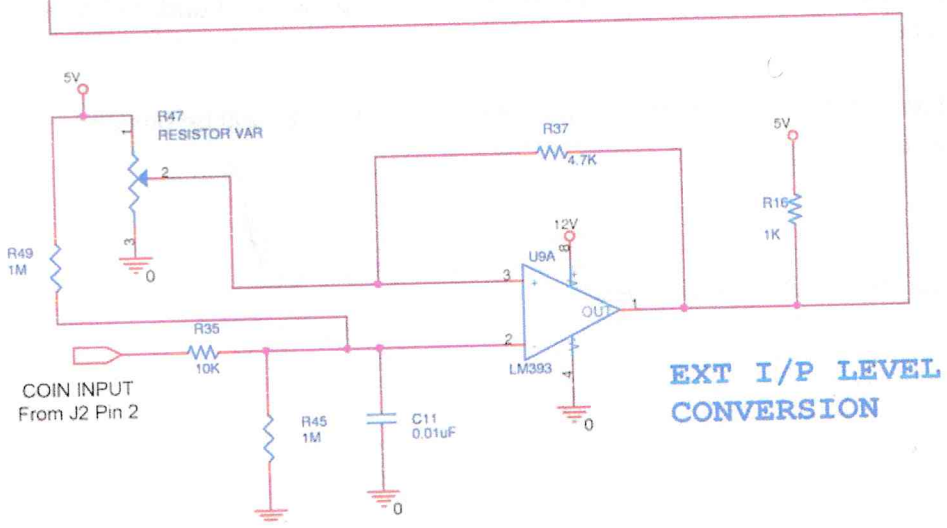
Once we assure that U9 is properly comparing voltages LED D14 will be blinking Red when coin signal comes in.

Refer to 2 Pictures on the next 2 Pages



EXTERNAL I/P INDICATION





EXT I/P LEVEL CONVERSION